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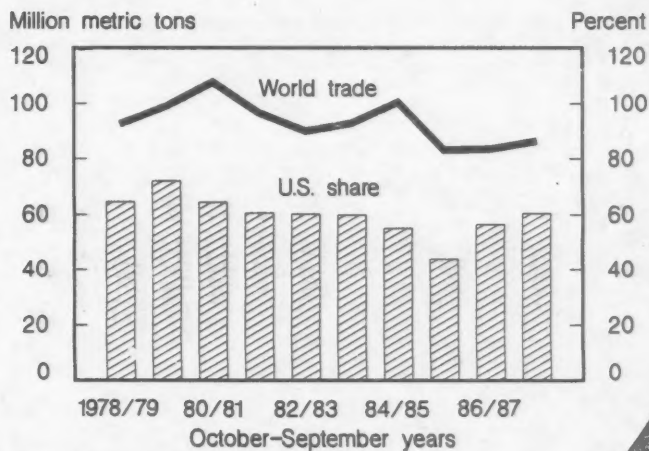
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Feed

Situation and Outlook Yearbook

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World Feed Grain Trade and U.S. Share



1987/88 forecast. Excludes intra-EC trade.

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SUMMARY

The 1988 feed grain program contains a few changes from 1987. The target prices and loan rates are lower, the diversion percentage and payment rates are lower for the voluntary paid land diversion (PLD) program, and farmers are provided an optional 0/92 program for 1988. Oats are singled out for special treatment. The acreage reduction program (ARP) requires 5 percent for oats compared with 20 percent for other feed grains. The PLD is not available to oat producers, and limited cross-compliance restrictions are lifted.

The expected net gain to producers for participating in the ARP is high, but considerably less than it appeared to be at signup for the 1987 program. Also, the PLD's benefit is decreased by a lower payment rate. Consequently, the ARP participation rate may drop slightly, and participation in the PLD could drop significantly.

Corn disappearance for September–November 1987 was 2.18 billion bushels, an increase of 195 million bushels from a year earlier. Exports were up 77 million, food and industrial use 12 million, and feed and residual disappearance 106 million. Lower 1987/88 supplies and the gain in use during the first quarter of the crop year left December 1 stocks slightly under 9.8 billion bushels, 540 million less than year-earlier stocks.

A key factor in this year's stronger corn and sorghum prices is the commitment of a larger share of the 1987/88 supply to CCC inventory, FOR, and regular CCC crop loans, and shrinking uncommitted stocks. Corn prices have been edging upward in expectation that cash redemptions from loans will be necessary to meet market needs. Corn prices received by farmers are expected to average \$1.65 to \$1.85 a bushel, up from \$1.50 in 1986/87.

Barley supplies are down 8 percent because of a 14-percent drop in production. Barley exports for June–November were 63.1 million bushels, 5 million ahead of the year-earlier pace. Exports for the remainder of the year will depend largely on EEP sales. Barley feeding is expected to be down this

year because feed barley prices are high relative to corn.

The supply of oats is expected to total 542 million bushels, 10 percent below last year and 26 percent below the 1985/86 supply. Farm prices have averaged 40 cents a bushel above year-earlier levels. Oat feeding, which accounted for about 84 percent of total use in 1986/87, is expected to be down 12 percent.

A 21-percent increase in 1987/88 carryin hay stocks was more than offset by a 4-percent-smaller crop, resulting in a supply of 181.5 million short tons, down less than 1 percent. Also, corn and sorghum silage harvest totaled 90.8 million tons, 3.8 million less than in 1986. Roughage-consuming animal units (RCAU's) are estimated at 78.1 million for 1987/88, down 2.7 million from 1986/87 because of smaller dairy and beef herds. However, hay use for May–December 1987 was up from the year before, and December 1 stocks were down 2 percent from a year earlier. Prices received by farmers in December were up 14 percent.

Feed demand is forecast up this year, with the largest increase in the first half. Although dairy and beef cow herds are down, milk output per cow is up, so feed use in dairying may be little changed. Hog, poultry, and cattle feeding, all heavy grain-using enterprises, are increasing.

Food and industrial use of corn is expected to grow 3 to 4 percent, in contrast to an annual average growth of 11 percent from 1981/82 through 1985/86. High fructose corn syrups have about achieved maximum market penetration, and growth is now reflecting the growth of the product markets in which they are used. Use of other corn sweeteners (glucose and dextrose) and dry-milled products has had little growth in recent years. Ethanol sales for the past 2 years appear to be limited seasonally by wet-milling capacity, as a larger share of the existing capacity shifts to higher-profit-margin HFCS production in the summer.

World coarse grain production is projected to drop 5 percent, utilization to increase 1–2 percent, and trade to grow 3–4 percent.

However, with production the lowest in 4 years, and consumption setting a record, ending stocks are forecast to decrease 12 percent.

Tradeable supplies of corn and sorghum outside the United States are tight again in 1987/88, following last year's drop, because of

continued low production in a number of major exporting countries. This has contributed to rising U.S. exports and market share. However, in many markets U.S. feed grain exports are still facing sharp competition with barley, feed-quality wheat, and non-grain feeds.

FEED GRAIN SUPPLY AND USE

Reduced 1987/88 U.S. feed grain supplies, tighter free stocks, and expanding exports and feed use are setting a bullish tone for prices. Carryin stocks were record large at 151.8 million tons, but feed grain production was down 15 percent to 215.2 million tons, leaving a total supply of 367.6 million tons, 11.7 million less than 1986/87 (aggregate of marketing years beginning June 1 for barley and oats and September 1 for corn and sorghum).

Feed grain use for 1987/88 is estimated at 237.5 million tons, 10 million above 1986/87. Exports are expected to rise 5.3 million tons to 51.6 million, while domestic use expands 4.7 million tons. Domestic food and industrial use likely will rise 1 million tons, with the rest in feed and residual disappearance. Total use will exceed production, resulting in a forecast decline of 21.7 million tons in ending stocks — the first drop since 1983/84.

The only basis on which a consistent year-to-year comparison of feed grain supply and use can be made is a June/May year. For

the 1987/88 June/May period, supply totals 406.8 million metric tons, 1.2 million larger than a year earlier. While record June 1 stocks of 190.9 million tons were up 38.4 million, the 1987 feed grain harvest dropped 37.1 million tons to 215.2 million.

Corn accounted for 84 percent of the feed grain supply for 1987/88, up slightly from 1986/87's 83 percent. Except for oats, the various grains' share has changed little in the past 12 years. In 1975/76, corn accounted for 80 percent of supply. Oats have declined from 5 percent of the supply in 1975/76 to 2 percent in 1987/88. Sorghum and barley accounted for approximately 10 percent and 5 percent of supply, respectively, practically unchanged from their relative importance in 1975/76.

Analysis of progress to date for feed grain use in 1987/88 is limited by incomplete data. Exports for June–Nov. 1987 totaled 23.1 million tons, up 49 percent from the previous year's 15.5 million tons. Estimates for domestic use are limited to corn, the only crop for which quarterly stock data are available. Food, seed, and industrial (FSI) use of corn for June–Nov. 1987 is estimated at 15.4 million

Feed grains; supply, disappearance, and ending stocks, June/May, 1980–1987

Year	Supply				Disappearance				Ending stocks	
	Begin-	Produc-	Imports	Total	Food	Feed	Export	Total	Govt.	Total
	ning	tion			&	&				
	stocks				indus.	resid.				
Million metric tons										
1980/81	107.2	197.9	0.3	305.4	23.0	128.1	73.6	224.7	7.6	80.7
1981/82	80.7	246.2	0.4	327.3	25.2	127.1	61.4	213.7	7.9	13.6
1982/83	113.6	250.2	0.4	364.2	27.2	136.8	53.8	217.8	14.0	146.4
1983/84	146.4	136.4	0.7	283.5	29.7	126.3	56.9	212.9	24.6	70.6
1984/85	70.6	236.9	0.8	308.3	31.7	128.9	58.4	219.0	10.3	89.3
1985/86	89.3	274.4	0.7	364.4	34.8	136.3	40.7	211.8	25.5	152.6
1986/87	152.5	252.3	0.8	405.6	35.4	138.6	40.7	214.7	49.6	190.9
1987/88	190.9	215.2	0.7	406.8	36.0	149.1	53.5	238.6		168.2

tons, compared with 14.9 for the comparable period in 1986. Feed and residual disappearance for June-Nov. was 57.3 million tons, compared with year-earlier disappearance of 47.7. For the 1987/88 June/May year, exports, FSI, and feed and residual disappearance are estimated to be 12.8 million tons, 600,000 tons, and 10.5 million tons, respectively, above year-earlier levels.

FEED GRAIN PROGRAM

On January 21 USDA announced the details for the 1988 feed grain program. The provisions are:

	Corn	Sorghum	Barley	Oats
Target price, \$/bu.	2.93	2.78	2.51	1.55
Loan rate, \$/bu.	1.77	1.68	1.44	.90
Expected deficiency payment rate, \$/bu	1.10	1.08	.76	.30
Advanced payment portion (40%), \$/bu.	.44	.432	.304	.12
ARP, percent	20	20	20	5
Paid land diversion, percent	10	10	10	0
Paid land diversion rate, \$/bu.	1.75	1.65	1.40	0

— 0/92 option: Producers may devote all or a portion of their permitted acreage to conservation uses (CU), and receive deficiency payments on the CU acreage at 92 percent of what the deficiency payment would have been if planted. Producers intending to use the 0/92 option must apply by March 11, and the application must state the acreage that will be planted and the acreage that will be devoted to conservation uses. Producers signing up for the 0/92 option will be guaranteed the estimated deficiency payment rates listed above. If producers do not sign up for the 0/92 option by March 11, or deviate from their submitted application, they may not receive a deficiency payment on CU acres. The regular deficiency payment will be made on the planted acres.

— An optional paid land diversion (PLD) program is available for corn, barley, and sorghum. The program allows producers to set aside an additional 10 percent of their crop base and receive a payment on their program yield at the rates shown above. The diversion payment will be made in generic certificates in mid-May.

— Signup period: February 16 through April 15, except that 0/92 application must be made prior to March 12.

— Advanced deficiency payments will be made equal to 40 percent of the estimated payment rates. One-half of the advanced payment will be paid in cash at signup and the balance will be in generic certificates in mid-May.

— Grazing of CU and ACR acreage will be permitted except for 5 consecutive months between April 1 and October 31 as designated by the State Agricultural Stabilization and Conservation Committee (ASCS).

— Haying on CU and ACR acreage will not be allowed in the 7 alternative months unless the State ASCS submits information that haying will not result in an adverse economic effect in the State. Haying will be allowed during 5 months only under emergency conditions.

— Limited cross compliance is in affect for 1988 crops of wheat, corn, sorghum, barley, upland cotton, and rice. To be eligible for support loans and payments, the acreage planted for harvest on a farm may not exceed the crop acreage base of these crops. Oats and ELS cotton are not subject to limited cross compliance regulations.

— Offsetting compliance does not apply.

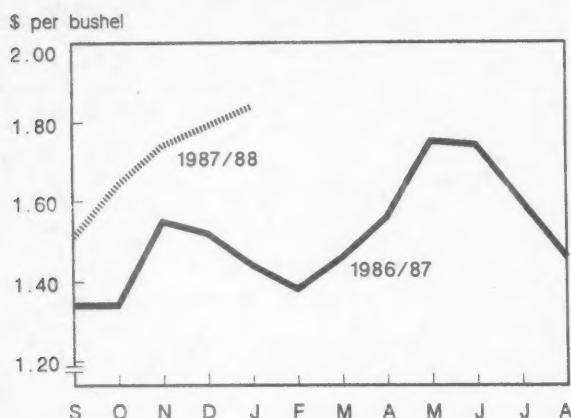
— Production of crops, program or nonprogram, will not be permitted on CU acreage under 0/92 option for feed grains.

Corn

The *Crop Production: 1987 Summary* report reduced the corn production estimate to 7,064 million bushels from the November 1 estimate of 7,166 million. Carryin stocks of 4,882 million brought total supply for 1987/88 to 11,948 (imports may add 2.0 million bushels to supply), about 3 percent less than the previous year's 12,292 million bushels. The smaller supply, and a 32-percent year-over-year gain in total disappearance during the last half of the 1986/87 crop year (Mar.-Aug. 1987), has resulted in a generally bullish market outlook--particularly on the part of corn farmers.

During the first 5 months of the crop year, No. 2 yellow corn at Central Illinois elevators averaged \$1.70 a bushel, compared with \$1.44 for the same period a year earlier.

Corn Prices at Central Illinois



Another indication of the more bullish price outlook this year is that prices for deferred future contracts (i.e., March, May, and July) have been in a range which would make cash redemption of 9-month CCC loans feasible. Last year's earlier future prices were well below cash redemption values. For example, in mid-October 1986, the March futures price was \$1.75 a bushel, compared with a price range of \$1.90-\$1.95 for cash redemption of 1986 crop loans. In mid-October 1987, the March futures averaged \$1.96 a bushel and the national average redemption value for 1987 loans was also in the \$1.90-\$1.95 a bushel range.

Corn farmers' optimism about corn prices this year has been supported by market movement. The Sept.-Nov. disappearance from supply totaled 2,179 million bushels, almost 10 percent above a year earlier. Of particular significance was a 24-percent (77 million bushels) increase in exports, from 321 million bushels shipped during Sept.-Nov. 1986. FSI use was up about 4 percent from 280 million bushels last year to 292 million during the first quarter of this crop year. Feed and residual use, at 1,489 million bushels, was almost 8 percent above the 1,384 million bushels used a year earlier. Also, this year's rate of increase in feed and residual disappearance over a year earlier appears to be in line with livestock and poultry numbers during the Sept.-Nov. quarter. The weighted increase for cattle on feed, market hogs, the laying flock, and broilers and turkeys on feed from Sept.-Nov. 1986 to Sept.-Nov. 1987 was about 7.2 percent.

Corn supply and disappearance, Sept.-Nov.

Item	1986/87	1987/88
Supply		
Million bushels		
Beginning stocks Sept. 1	4,039.5	4,881.7
CCC	545.7	1,443.2
FOR 1/	711.4	1,497.7
Loan	2,588.9	2,102.3
Free	193.4	-161.5
Production	8,249.9	7,064.1
Imports	.8	.5
Total	12,290.2	11,946.3
Disappearance		
FSI	280	292
Exports	321.1	398.0
Feed and Residual	1,383.6	1,489.4
Total	1,984.7	2,179.4
Stocks Dec. 1		
CCC	10,305.5	9,766.9
FOR	968.2	1,683.4
Loan	1,105.5	1,494.2
Free	2,878.3	2,841.5
Total	5,353.5	3,747.8
Exchanged for generic certificates	343.8	1,334.1

1/ Includes special producer storage loans.

The smaller supply and first-quarter disappearance left stocks on hand December 1, 1987 of almost 9.77 billion bushels, about 540 million less than a year earlier. However, about 6 billion bushels of December 1 stocks were in CCC inventory or under FOR and regular crop loans, leaving a little over 3.7 billion bushels of uncommitted stocks. In 1986, uncommitted stocks December 1 amounted to nearly 5.4 billion bushels. Thus, uncommitted stocks were tightening faster than a year ago.

Approximately \$3.0 billion of generic certificates were available in December. Through March, another \$2.6 billion will be issued. Following that, the next significant issue will be in mid-May when the certificates portion of advanced deficiency payments and paid land diversion payments is issued.

December 1 stocks of corn were 9,767 million bushels, of which 4,384 million were in CCC stocks, the FOR, and regular loans from 1986 and prior crops. Thus, 5,383 million bushels were 1987-crop corn, of which 1,635.0 million were under loan, leaving 3,748 million as remaining stocks from the 1987 harvest of 7,064 million bushels. Placements of 1987-crop corn in regular 9-month CCC loans

Issue and use of generic certificates

Crop year	Value issued	Value exchanged	Value used for corn	Bushels of corn
1985/86	- - - - -	- - - - -	- - - - -	- - - - -
April-Aug.	1.7	.87	.47	252.6
1986/87				
Sept.-Nov.	1.1	.81	.52	345.8
Dec.-Feb.	3.1	1.51	1.21	750.9
Mar.-May	2.3	3.52	2.70	1,641.0
June-Aug.	1.3	.96	.78	436.1
1987/88				
Sept.-Nov.	4.5 ¹	2.81	2.04	1,334.1

1/ Through December 15, 1987

totalled 2,385 million bushels, leaving a balance of 4,679 million. Subtracting the new-crop corn in the December 1 inventory gives an estimate of 931 million bushels of 1987-crop corn used during the Sept.-Nov. quarter.

By early February an additional 1.5 billion bushels of 1987-crop corn had been placed under loan, which reduces the free stocks available for Dec.-Aug. use to 2.2 billion. However, some of these are also likely to be placed under loan. Dec.-Aug. disappearance is forecast at 5.6 billion bushels. If approximately 2.0 billion bushels of free stocks are available, certificate exchanges and cash redemptions would have to account for most of the balance of 3.6 billion bushels (some corn will be available from CCC catalogue sales and rotation of FOR). Last year, \$4.7 billion of generic certificates were exchanged for 2.86 million bushels of corn during Dec.-Aug.

Currently, corn prices are 20 percent above a year ago, so more certificates will be required per bushel of corn exchanged, in addition to the increased volume of corn if needs are to be met largely by certificate exchanges. If sufficient certificates are not available, or if prices do not favor certificate exchange, then corn prices will rise to encourage cash redemption in order to meet market needs.

For 1987-crop loans, interest accumulates at about 1 cent a bushel per month under loan. Thus, at maturity the breakeven price for cash redemption would be about \$1.92, but for corn under loan only 5 months it would be about \$1.87. Higher prices would be required to redeem corn from extended crop loans from earlier years because of the increased interest accumulated on the loan. For example, a loan

taken out in December 1986 and extended September 1987 would have a redemption value of about \$2.02 by June.

Program Participation In 1988 to Remain High

The expected net return above variable cost per acre for participation in the 1988 feed grain program, compared with the net return if not in the program, indicates a substantial benefit for participation, except for very large farms on which the \$50,000 payment limitation would prevent the collection of deficiency payments sufficient to replace the net revenue lost by the 20-percent ARP. However, the expected added return for participation this year is not as great as expected for the 1987 program. The average price received by farmers for Sept. 1986-Feb. 1987 was \$1.45 a bushel and the loan rate was \$1.82. The smaller additional net revenue gained from participation, compared with a year earlier, may result in slightly lower participation this year.

Less land likely will be set aside under the PLD program this year. A producer enrolling in the PLD must place 10 percent of his base in the ACR, a 33-percent reduction from the 15 percent last year. However, the lower payment rate, \$1.75 compared with \$2.00 last year, and a widening gap between program yield and actual yield, will result in a decrease in net additional expected return above variable cost per acre for the PLD program. Consequently, fewer farmers likely will opt for the PLD this year.

Last year 62.4 percent of the corn base enrolled in the ARP program also participated in the PLD. If this drops to 40 percent this year, the paid diversion set aside may be about 3.0 million acres this year, compared with more than 6.8 million last year.

Sorghum

The *Crop Production: 1987 Summary* estimated the 1987 sorghum crop at 740.9 million bushels, down 197 million from 1986 and one-third below 1985. Area harvested, at 10.6 million acres, was down 23 percent because of high participation in the feed grain program -- 83 percent compared with a little below 73 percent in 1986. Sorghum producers

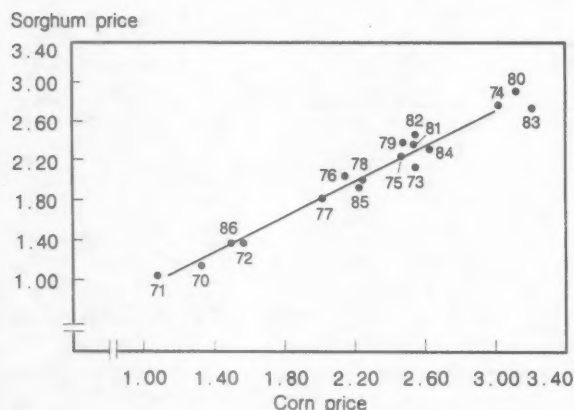
also had a high participation in the PLD. The decline in harvested area from 1986's 13.9 million acres was partially offset by higher yields. Average yield for 1987 was a record 69.9 bushels per acre, an increase of 3 percent over the previous year's 67.7 bushels.

However, with carryin stocks of 732 million bushels, almost equal to production, total supply for the 1987/88 crop year of 1,472 million bushels is down only 1 percent from 1986/87's supply of 1,489 million bushels. Carryin stocks for 1987/88 were almost a third larger than a year earlier.

Food, seed, and industrial use for 1987/88 is expected to show little change from last year's 15 million bushels. Exports are forecast at 225 million bushels, an increase of 27 million from 1986/87. Exports for Sept.-Nov. were 44.9 million bushels, down 2.6 million from a year earlier. Based on the *U.S. Export Sales* report, shipments for December to early February totaled about 43 million bushels, up 7.4 million from a year earlier. Also, outstanding sales on February 4 were 46.7 million bushels, up 9.3 million from the corresponding date last year.

Feed and residual use is estimated at 550 million bushels for 1987/88, about the same as last year. Cattle on feed, the number of market hogs, and broiler production are all up this year. However, with all of the carryin stocks in CCC inventory and FOR and regular loans, and with 328 million bushels of new-crop sorghum already placed under loan, free stocks are tight.

Relationship of Corn and Sorghum Prices



For 1970-1986, the price per bushel received by farmers for sorghum averaged 1 cent a bushel more than 90 percent of the price per bushel received by farmers for corn. Thus, corn can reach its cash redemption price without sorghum reaching its cash redemption price. With sorghum prices below cash redemption values, and a relatively small quantity of sorghum exchanged for generic certificates, free stocks are expected to be a limiting factor on feed use. Instead, corn likely will make inroads into the fringe area of the normal sorghum-feeding regions.

Program Participation to Remain High

Eighty-three percent of the sorghum base was enrolled in the feed grain program in 1987, and 51 percent of the enrolled base also participated in the PLD option. Thus, 4.1 million acres of base were in the ACR in 1987.

Based on average data for the United States, the prospective gain from participating in the 1988 program is less than last year at signup for the 1987 program. However, the estimated additional net revenues above variable cost for participating this year is over 70 percent above not being in the program, so this year's participation is expected to be near last year's 83 percent.

The PLD option this year provides for a diversion of 10 percent of the base to ACR, and the payment rate has been reduced to \$1.65 a bushel from \$1.90 last year. The PLD does not appear to promise a clear-cut gain in net revenue, and with a lower payment rate and higher cash market prices for sorghum this year, fewer farmers likely will enroll in the PLD option. Therefore, acreage in the ACR for the paid-for diversion program may be about half of last year's 1.1 million.

Barley

Barley production for 1987 was 527 million bushels, almost 14 percent below 1986. The crop yield was 52.6 bushels an acre, compared with 50.8 in 1986. Harvested acreage in 1987 was 16 percent below the year before at 10 million acres. However, the 12 million acres harvested in 1986 was the largest since 1962. June 1 stocks were 11 million bushels above last year's at 325 million.

Imports for 1987/88 are projected at 5 million bushels, for a total supply of 868 million.

Cool, wet weather during harvest in the Dakotas reduced the quality of some malting barley, which may have put some barley from malting varieties into the market as feed barley. However, feed use likely will continue to decline until barley prices move more in line with feeding values relative to corn. The average ratio of feed barley to corn price received by farmers during October, November, and December was 1.01 compared to a feeding value ratio of .8. Feed use of barley is projected at 275 million bushels for 1987/88, compared with 296 million last year.

Food, seed, and industrial use is projected to be little changed from 1986/87's 174 million bushels. The FSI situation has not shown much growth, in part because of flat demand by the brewing industry and an increase in beer imports. Beer production accounts for between 80 and 90 percent of FSI use of barley.

Barley exports totaled 137 million bushels in 1986/87 and are projected at 125 million for 1987/88. However, exports through November 1987 were 63.1 million bushels, compared with 58.2 million through November 1986. Based on *U.S. Export Sales*, shipments in December and January were up more than 6 million bushels from a year earlier. Outstanding sales on February 4 were only 18 million bushels compared with 56 million last year. The outlook for the remainder of the marketing year will depend largely on EEP sales. Some malt exports may occur under the EEP as well.

While total use for 1987/88 is projected down 5 percent to 575 million bushels, it will still be 9 percent greater than 1987 production. Thus, ending stocks for 1987/88 are expected to be down almost 13 percent to 293 million bushels. The stocks-to-use ratio, at 51 percent, compares to 55 percent a year ago. The 10-year average ending stocks-to-use ratio is 45 percent.

The average price received by farmers for all barley is projected to be between \$1.75 and \$1.95 a bushel, compared to \$1.61 for 1986/87. Through December, the simple average of monthly prices was \$1.84 a bushel, 26 cents above the comparable period in 1986. Last year, marketings through December

accounted for 60 percent of the total. Malting barley prices have averaged \$2.09 through December, with monthly prices reaching a high of \$2.55 in August before declining to an average of \$2.00 in Oct.-Dec. Malting barley prices averaged \$1.85 during June-Dec. 1986. The average feed barley price through December was \$1.65 a bushel, up 18 cents from a year earlier. The Duluth feed barley price averaged \$1.72 a bushel through December, compared with the Minneapolis malting barley price of \$1.98.

It was announced in January that some of the barley production and stocks surveys discontinued in 1986 would be reinstated. Production forecasts will be made for July 1 and September 1 in addition to August 1. Stocks estimates will be restored for September 1, December 1, and March 1 beginning with the new crop year.

Farm program announcements were made in January. For barley the target price is \$2.51 and the loan rate is \$1.44. Acreage reduction requirements are 20 percent of base acreage. Barley and oats crop acreage bases will continue to be combined. An optional 10 percent paid land diversion program was included for barley, with a payment rate of \$1.40 a bushel. Diversion payments will be in generic commodity certificates. An optional program known as 0/92 allows producers to devote a portion of wheat or feed grain permitted acreage to conserving uses, and receive deficiency payments equal to 92 percent of the deficiency payment that would have been due on the CU acres if planted. The estimated deficiency payment rate of \$0.76 a bushel is guaranteed to producers who participate in 0/92 if they sign up by March 11.

The program participation rate for 1986/87 was 82 percent. In 1987, estimated net returns for malting barley producers averaged 25 to 30 percent higher for participating compared to not participating in the barley program. Market conditions and Government programs announced for 1988 indicate nearly equal net returns are expected on average this year, whether or not the producer participates in the program. Therefore, the participation rate among malting barley producers is expected to decline this year. Feed barley producers on average will find participation relatively less

attractive compared with last year. However, because net returns are still expected to be 40 to 50 percent higher under program participation, the participation rate among feed barley producers likely will be similar to last year.

Oats

The January Crop Production: 1987 Summary report estimated 1987 oats production at 374 million bushels, down 13 million from the 1986 crop and 28 percent below 1985/86. Yield for 1987 was 54 bushels an acre compared to 56.3 in 1986 and 63.7 in 1985. Harvested area of 6.9 million acres was up 1 percent, but almost 11 million planted acres were left unharvested this year. Oats are being used extensively as a cover crop on ARP acreage which is counted as planted acres, but cannot be harvested for grain.

Imports are projected to rise 2 million bushels to 35 million in 1987/88. Imports through November totaled 15.2 million bushels, compared to 14.3 million through November of 1986. Beginning stocks were 51 percent lower than last year's 184 million bushels. Thus, estimated 1987/88 supply of 542 million bushels is 10 percent below last year.

Total oats disappearance for 1987/88 is projected to be 426 million bushels, down 45 million from 1986. Most of the decline is due to forecast lower feed use, which is projected to be 350 million bushels this year. A 2-million-bushel decline in exports is offset by a 2-million-bushel increase in FSI use of oats. As with barley, oats feeding use probably will continue to decline until oats prices move more in line with feeding values relative to corn. The ratio of oats to corn prices received per bushel by farmers for October, November, and December was 1.02, compared to a feed value ratio of 0.5.

Oats exports will amount to only about 1 million bushels in 1987/88, almost 2 million below last year. Food, seed, and industrial use is expected to rise 2 million bushels to 75 million.

Ending stocks are expected to tighten to 116 million bushels this year. However, the decline in total use will be largely offsetting and the stocks-to-use ratio will only drop

from 28 percent in 1986/87 to 27 percent for 1987/88. The 10-year ending stocks-to-use ratio is 37 percent.

Monthly prices received by farmers for 1987/88 have averaged \$1.53 a bushel for the first 7 months of the year. This is \$0.43 a bushel higher than for the same period last year. If farm marketings are similar to 1986/87, 60 percent of total marketings occurred through December. The 1987/88 season-average price is expected to be between \$1.50 and \$1.65 a bushel.

The 1988 oats program was announced in January. The most notable changes from the September announcements were mandated by the Agricultural Budget Reconciliation Act of 1987. The maximum ARP allowed for oats was reduced from 20 percent to 5 percent. In addition, there will be no paid land diversion for oats. The target price of \$1.55 is 5 cents below 1987. The loan rate is 4 cents below 1987/88's at \$0.90. An optional acreage diversion program known as O/92 would permit farmers to divert all or part of their permitted acreage to conservation use and still receive up to 92 percent of their deficiency payments. For oats, the estimated deficiency payment rate is \$0.30 a bushel.

The reduced ARP and the elimination of the paid land diversion for oats is expected to stimulate domestic production. In addition, retirement of land to the conservation reserve has reduced the program base acreage in the last 2 years. Declining oats production in recent years may in part be due to relatively higher net returns for barley production in the Northern Plains States — a major producing region for both crops. A comparison of expected net returns between 1987 and 1988 for barley and oats, including the effects of Government programs, indicates oats will be relatively more profitable in 1988 than in 1987.

Hay

Hay production for 1987 was revised down 3 percent in January to 149.1 million short tons from the October estimate of 153.7. The area harvested turned out to be about 500,000 acres larger than the October estimate, but the yield was reduced by 4 percent, to 2.46 tons per acre. Revised production for 1987 is 6.4 million tons less than 1986's record 155.5 million. Alfalfa and alfalfa mixture hay

production turned out to be 84.6 million tons, down 7 million tons from 1986, and all other hay production of 64.6 million tons was 600,000 above the previous year's 64 million.

Adding May 1 carryin hay stocks of 32.4 million tons gives a total supply of 181.5 million tons in the 1987/88 May-April crop year. In 1986/87, carryin stocks were 26.7 million tons with a total supply of 182.2 million.

Silage production for 1987/88 also is down from a year earlier. Corn silage production in 1987 totaled 85.6 million tons, down 3.1 million from 1986's harvest of 88.7 million. The area harvested decreased 400,000 acres but yield was up .5 ton per acre. In addition 5.2 million tons of sorghum silage were harvested in 1987, compared with 5.9 million harvested a year earlier. Area harvested declined by 76,000 acres but yield increased by .4 ton per acre.

Roughage consuming animal units (RCAU's) for 1987/88 number about 78.1 million, compared with 80.7 million on hand last year. Smaller beef and milking herds account for the decrease in RCAU's this year.

Hay stocks December 1, 1987 were 119.7 million tons, compared with 121.7 million on hand a year earlier. Thus, disappearance for May-Nov. 1987 amounted to 61.8 million tons, compared with year-earlier use of 60.5 million. For May-Nov., the price received by farmers for hay averaged \$64.60 a ton, \$4.74 above the comparable period in 1986. For December and January this year, prices averaged \$63.75 a ton, up \$7.65 from a year earlier.

FEED DEMAND

The estimated 1987/1988 feed and residual use for feed grains (corn, sorghum, barley and oats) is up from 1986/1987 by 3.7 million metric tons. The increase is a continuation of the upward trend in feed grain use since the 1983/84 marketing year. Feed and residual use for the four feed grains in 1986/87 jumped 8 percent from the 134.8 million metric tons used in 1985/86. During 1986/87, feed and residual use of corn, the majority of the feed, was up 15 percent from the year earlier. Feed and residual use in 1986/87 of sorghum, barley, and oats were all

down from last year -- 18 percent, 11 percent, and 14 percent respectively.

An increase in animal product output resulted in an apparent increase of about 8 percent in feed and residual use of corn in Sept. Nov. Feed demand is forecast up this year with the largest increases in the first half. Although dairy and beef cow herds are down, milk output per cow is up, so feed use in dairying may be little changed. Hog and poultry production and cattle feeding, all heavy grain using enterprises, are increasing.

In 1987, commercial cattle slaughter declined over 4 percent from 1986, due mainly to a 17-percent drop in cow slaughter. Cattle slaughter may decline about 4 percent in 1988. Cow slaughter likely will decline again but fed cattle slaughter will also be lower. Fed cattle marketings will likely remain above a year ago through late spring to early summer, then decline below year-earlier levels. For the Oct.-Sept. 1987/88 feed year, the number of fed cattle marketed may be nearly the same to slightly above last year. In Oct.-Dec. 1987, cattle slaughter weights were up about 3 percent from the year-earlier level. Carrying cattle to these heavier weights required additional feed. Severe winter storms in early 1988 have likely increased feed use as more energy has been needed for body maintenance. The net impact on total feed use will depend on weather during the remainder of the winter and cattle feeders marketing practices.

Feed demand from the hog sector will likely remain strong through 1987/88. Pork production during Oct. 1987-Sept. 1988 is expected to increase 10 percent from the year-earlier level. If hog producers carry through with their intentions to increase Mar.-May 1988 sow farrowings only 2 percent, feed demand from the pork sector will level off in late 1988.

The number of dairy cows in 1988 will likely average only slightly below the 1987 level. Cow numbers on Jan. 1, 1988 were down 2 percent from 1987, and dairy replacement heifers were down 5 percent. Dairy feed use in 1987 was likely down less than cow numbers because milk per cow was up 3 percent from 1986. The milk-feed price ratio was record-high in 1987 and encouraged high rates of feeding for increased milk production. A lower support price for milk and expected

higher prices of concentrate feeds will likely lower the milk-feed price ratio this year. Still, milk production in 1988 is expected to be up nearly 2 percent from 1987 as increased output per cow more than offsets the slight drop in the number of cows.

The large increases in poultry production of the past few years may slow in 1988 if poultry prices remain very weak. In 1987, broiler production was up 9 percent from 1986, and a 5-percent increase is forecast for 1988. In 1987, producers continued to feed to heavier weights, but most of the increase was in numbers of birds. Producers will likely continue feeding birds to heavier weights in 1988 unless sales of convenience food items slow. Turkey production increased 19 percent in 1987 and a 10-percent rise is likely in 1988. On a Oct. 1986-Sept. 1987 year, total poultry meat production rose 9 percent. Feed use by the poultry sector will rise again in 1987/88 as poultry meat production is expected to be up about 8 percent. Feed demand from the egg production sector during 1987/88 may be little changed from the previous year, as egg production is expected to be about unchanged.

FOOD, SEED, AND INDUSTRIAL USE OF CORN

The growth of food, seed, and industrial use of corn (FSI) for the first quarter of 1987/88 was approximately 5 percent over the same quarter last year. However, it is still anticipated that the FSI growth rate for 1987/88 will be in the 3-4 percent range. The growth outlook for FSI in the next several years, barring some technological breakthrough or policy change, should remain about 3-4 percent. In the past 5 years, FSI corn use has averaged the equivalent of 20 percent of total domestic disappearance for U.S. corn.

Since 1980, the highest corn-use category of FSI has been high fructose corn syrup (HFCS). HFCS used 339 million bushels of corn in 1986/87, up 3 percent from last year. First-quarter corn use in 1987/88 for HFCS was 79 million bushels, 5 percent higher than the same period last year. The overall HFCS growth rate for 1987/88 is projected to be closer to 3 percent. HFCS prices have been very low the past several months. The average Midwest price for HFCS-42, which

was 12.5 cents a pound in late November 1987, has slipped as low as 8 cents a pound. The Midwest wet price for HFCS-55 was 15 cents a pound in September 1987 but has now dropped to approximately 11 cents a pound.

A futures contract for HFCS was established in April 1987 at the Minneapolis Grain Exchange. A number of difficulties were encountered in the trading of the contract. Trading of the contract came to a virtual halt by midsummer. To revive the contract, a number of possible changes are under review by the Commodity Futures Trading Commission. Some of the contract changes being considered include redefining the delivery points, adding a number of contract months, changing the size of the trading units, and reducing the premium charges.

In 1986/87, 63 percent of corn disappearance for HFCS was for HFCS-55, which is primarily used in soft drinks. The remainder was for HFCS-42, used in the sweetening of bakery, dairy, and cereal products. This year the ratio has changed slightly, with 60 percent of disappearance for HFCS-55 and the remaining 40 percent for HFCS-42.

Glucose and dextrose production remained at a relatively flat pace. However, there has been a 25-percent increase in corn use for starch over the past 5 years. Strong demand for starch by the paper and corrugating industries has contributed to the higher growth. Starch is also used by the brewing, pharmaceutical, building, textile, and food industries. The strong economy has contributed to the good demand for starch. However, starch is more susceptible than other corn-based products to the ups and downs of the business cycle, and accordingly its growth pattern is subject to greater variations.

Production of crystalline fructose (CF) from Staley's new plant began last summer. With this new, more efficient plant, CF is expected to serve as a partial replacement for sugar in a number of new products. Previously, CF has been sufficiently expensive that its only major use has been in health foods. However, even if CF is produced in the future for a lower price, it remains to be seen how adaptable it is on a commercial scale and

Corn: Food, seed, and industrial use 1/

Year beginning September 1	Wet-milled products					Dry-milled and alkaline cooked products	Seed	Total
	HFCS	Glucose and dextrose	Starch	Alcohol	Dry-milled alcohol			
Million bushels								
1975	45	162	116	5	20	154	20	522
1976	62	164	116	10	15	155	20	542
1977	80	170	124	10	20	158	20	582
1978	105	170	124	15	20	155	20	609
1979	127	170	120	25	20	158	20	640
1980	165	183	120	35	35	160	20	718
1981	185	183	130	83	35	162	19	797
1982	215	188	127	130	50	170	15	895
1983	256	189	147	150	50	164	19	975
1984	310	187	143	170	100	160	21	1,091
1985	328	188	152	185	127	161	19	1,160
1986 2/	339	185	155	200	135	161	16	1,191
1987 3/	348	186	160	207	145	163	16	1,225

1/ Data in this table are estimates based on production and sales figures obtained from various Government and private industry publications as well as on unpublished information provided by numerous industry sources. 2/ Preliminary. 3/ Projected.

what type of reception it will receive from consumers.

The aggregate amount of corn used for dry-milled and alkaline-cooked product has remained virtually unchanged over the past several years, but some very different trends are taking place within the category. Corn use in beer for 1986/87 dropped to its lowest annual total in a decade. However, corn use for cereal, flour, and meal has been rising for a number of years. The net effect for dry-milling is that overall usage remains relatively flat, as a rise for cereal, meal, and flour offsets the reduction for beer use.

The use of corn for ethanol in 1987 continues to climb, but at a much slower pace in comparison with the years going back to 1980. In 1987/88, corn use for ethanol is expected to increase by 3-5 percent over last year, compared with the double digit increases that occurred in 1979-85. Monthly sales of ethanol blended fuel again reached new records during the first 7 months of calendar 1987. However, as in 1986, sales fell off during late summer and the fall months. Ethanol sales either had no increase or were only slightly higher than 1986 sales for the last 5 months of the year.

One of the reasons for lower ethanol sales in the summer is the strong competition for

wet-milling capacity. Heavy demand for HFCS in soft drinks in the summer, along with the fact that HFCS cannot be stored for long periods of time, means that any wet-milling capacity that has the ability to shift moves into higher-profit HFCS production. In the fall, milling capacity is again available for ethanol production with the decline in demand for HFCS. However, at the same time, seasonal demand for automotive fuel and presumably ethanol also declines.

There were predictions of large-scale increases in the use of ethanol with a mandate for oxygenated fuel use in the winter in Colorado. This has not proven to be the case. The additive MTBE is being used in over 90 percent of the oxygenated fuels sold in Colorado. Ethanol fuels are currently accounting for only about 5 percent of fuel sales.

WORLD COARSE GRAIN SITUATION

World coarse grain production is projected to decline 5 percent during 1987/88, utilization to increase 1 to 2 percent, and trade to grow 3 to 4 percent. Ending stocks for the world are forecast to decrease 12 percent, with production forecast at 792 million tons, the lowest in 4 years, and consumption expected to set another record at

878 million. The world stocks-to-use ratio will be the lowest in 3 years at 25 percent.

While the tightening of world supplies largely reflects changes in the United States, foreign adjustments are also taking place. Foreign ending stocks are projected to drop 7 percent while foreign utilization will only increase 1 percent. Foreign production of all coarse grains is projected to drop less than 1 percent from last year's record, as corn, sorghum, and oats output decline but barley expands.

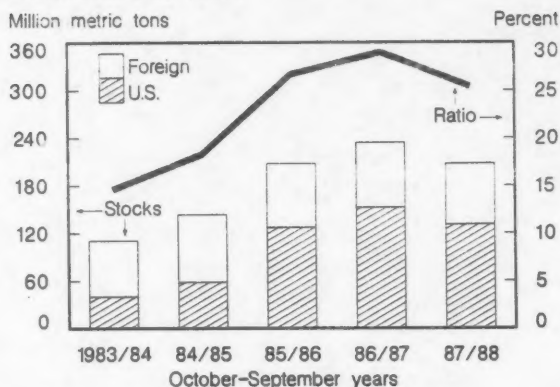
Exportable supplies of corn and sorghum outside the United States are tight again in 1987/88, following a drop a year ago, because of low production in a number of exporting countries. However, U.S. feedgrain exports continue to face sharp competition from barley, feed-quality wheat, and non-grain feeds in some markets. The short supply of corn and sorghum in competing countries, and growing demand by some key importers, has contributed to rising U.S. exports and market share. The United States is expected to account for 60.5 percent of world coarse grain exports in 1987/88, up from 57 percent in 1986/87 and just 44 percent in 1985/86. ^{1/} The forecast share for 1987/88 will be the highest since 1981/82, although the volume of exports was higher then.

Current Production Focus on Southern Hemisphere

Foreign production of coarse grains is forecast at 577 million tons, compared with 580 million in 1986/87. Many offsetting changes characterize the 1987/88 season and explain why the aggregate change is so small. Midway through 1987/88, production estimates for Northern Hemisphere countries are quite firm, with only minor revisions likely. Output in the European Community (EC) is virtually unchanged, as unfavorable weather in the northern countries held back yield advances. Poor weather also had an adverse impact on Scandinavia, with output in non-EC Western Europe down 14 percent. Eastern Europe's coarse grain production fell 12 percent, as a period of hot, dry weather reduced corn output

^{1/} All trade years referred to in this section are October-September and exclude intra EC trade unless otherwise specified.

World Coarse Grain Ending Stocks and Stocks-to-Use Ratio



1987/88 forecast. World estimates include new data series for China.

sharply. Soviet output, however, was up 9 percent to a record 115.8 million tons. Many Asian nations, notably India and Thailand, experienced poor crops because of hot weather and weak monsoon rains. However, China had mostly favorable conditions and a record corn crop.

The situation in the Southern Hemisphere is still evolving, with harvests a month or two away in most areas. Most attention is currently focused on the corn crops in Argentina, Brazil, and South Africa, which have a large potential impact on world trade. All three of these countries face substantial variability in their weather. More attractive prices for soybeans have apparently led to reduced corn plantings in both Argentina and Brazil. Even with much better growing conditions to date and prospects for better yields in Argentina, the lower plantings are expected to result in a crop similar to last year's weather-reduced outturn. Financial pressures on producers are strong and some uncertainty about government policy—a possible land tax and an export tax on grains—also may have influenced planting decisions.

Brazil is forecast to produce 22.5 million tons of corn for 1987/88, a decline of 4 million tons from last year's record crop, but the extent of switching from corn into soybeans is not fully known yet. It appears that part of the switch involves highly productive commercial land. Last year's announcements of high domestic prices triggered a sharp expansion in plantings and record yields. However, the bumper crop strained storage

capacity and prices received by farmers often dropped below official levels.

In South Africa, plantings are reportedly down because of government efforts to discourage corn production in favor of other crops and livestock. This is related to the high cost of subsidizing its corn exports onto the world market, where prices are substantially below domestic South African prices. Unusually heavy rains early in the season resulted in much of the crop being planted late, leaving part of the crop still vulnerable to the high temperatures and dry conditions that often occur this time of year. However, generally favorable conditions to date indicate a crop of 8.5 million tons, up 13 percent from 1986/87 and sufficient to allow some exports.

Australia's coarse grain harvests are nearly complete, except for sorghum. The sorghum crop is forecast to increase 33 percent to 1.6 million tons, mainly due to improved yields as area increased marginally. Production of oats is also up, by 13 percent, because of higher area. Partially offsetting these gains was another drop in barley production—down for the third consecutive year. The 1987/88 barley crop of 3.3 million tons is down 7 percent, although plantings were up slightly. However, this decline was less than that of wheat, which dropped 26 percent from a much larger base. Although there has been some switching among grains, Australian farmers in the last 2 years have increasingly turned from grains to livestock and non-grain crops in the face of declining grain prices.

Moderate Pickup Forecast for World Imports

World imports of coarse grains are projected to rise 2.9 million tons—about 3.5 percent—during 1987/88. While this growth is much less than for wheat, it is a considerable improvement over last year when trade increased less than a half million tons or less than .5 percent. Most of the year-to-year increase is expected in corn, with a small gain in sorghum trade, and a slight drop for barley. Although export prices for all the coarse grains have firmed somewhat in recent weeks, they remain relatively low.

Part of the forecast increase in world trade is related to production shortfalls,

World coarse grain trade: Major exporters and importers, 1984/85-1987/88

Country	1984/85*	1985/86	1986/87 preliminary	1987/88 forecast
Million metric tons				
Exporters				
United States	55.4	36.4	47.5	52.3
Canada	3.3	5.8	6.6	5.8
Argentina	10.6	5.7	5.0	6.0
Australia	6.4	5.0	3.1	3.6
EC-12	8.5	8.1	6.2	8.5
Other Western Europe	1.7	2.0	1.4	0.6
Eastern Europe	2.8	1.9	2.7	1.2
Thailand	3.5	4.0	2.6	1.1
South Africa	0.2	1.5	2.6	1.8
China	5.7	7.1	4.1	4.3
Others	2.1	1.7	1.8	1.4
Total	100.4	83.2	83.6	86.5
Importers				
EC-12	9.5	5.5	3.3	3.8
Other Western Europe	1.3	1.1	1.3	1.7
Eastern Europe	3.8	5.6	3.3	5.1
Japan	20.7	21.5	22.0	22.1
China	0.1	0.7	2.1	3.0
USSR	27.3	13.6	11.6	10.0
Egypt	1.7	1.9	2.4	2.3
Algeria	1.1	0.7	1.2	1.2
Mexico	4.2	2.4	4.2	5.1
Brazil	0.3	2.1	1.6	0.2
Venezuela	1.6	0.8	0.8	0.9
Israel	1.0	1.1	1.1	1.1
Saudi Arabia	5.5	7.4	9.2	6.2
Iran	1.3	1.5	0.9	1.7
Iraq	0.8	0.2	0.7	0.9
Malaysia	1.2	1.2	1.3	1.4
Korea, Rep.	3.4	4.0	4.6	5.8
Taiwan	4.3	4.1	4.8	4.8
Others	11.2	7.7	7.3	9.3
Total	100.4	83.2	83.6	86.5

*October-September year.

especially in Eastern Europe. Coarse grain imports by Eastern Europe could jump over 50 percent to 5.1 million tons as both corn and barley imports increase. Given many of these countries' very limited foreign exchange, however, the availability of credit and relative prices of the various coarse grains (and feed wheat) will shape the final mix of commodities purchased. An increase of more than a third in coarse grain imports is forecast for non-EC Western Europe, primarily because of a poor Scandinavian barley harvest. Also, both Eastern Europe and non EC Western Europe will reduce their coarse grain exports.

A forecast increase of 1 percent in foreign consumption of coarse grains will also account for some gains in trade. Much of the increase in use is taking place in the higher-income developing countries, particularly East Asia. The combined feed use of South Korea and Taiwan could rise almost 20 percent and continue to spur strong import demand. Both countries mainly import corn. Taiwan's coarse grain imports are expected to stay equal to last year's record 4.8 million tons, while Korea's rise an additional 20 percent to 5.8 million.

Imported feed-quality wheat has captured a significant share of Korea's rising feed use. Feed wheat imports reached 1.9 million tons in 1986/87 (July-June), mostly from Australia and Canada. Despite lower availability from Australia this year, increased EC exports and continued Canadian sales may push feed wheat imports to near last year's level. Although a relatively small amount is traded compared to coarse grains, its continued availability at competitive prices means that feed wheat will remain a factor in holding down growth in world coarse grain use in 1987/88. World feed use of wheat is anticipated to drop this year, but only because of a sharp decline in the USSR. Other foreign use is forecast to rise about 4 percent.

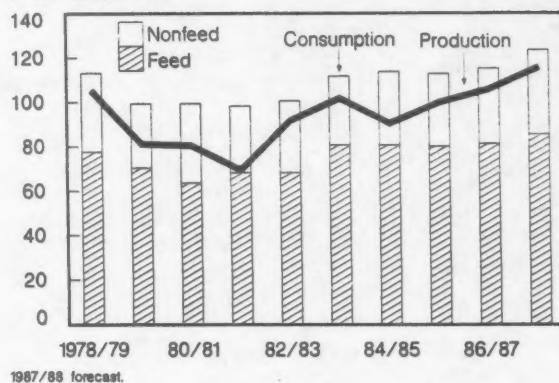
Soviet Union and China Strongly Influence World Trade Outlook

Although both the Soviet Union and China had good crops in 1987, considerable uncertainty surrounds current trade prospects, as well as the longer-term outlook. Both countries are debating the direction of future policies. In 1987/88, grain production in the USSR was relatively large for the second straight year. The USSR has attributed much of these gains to current reforms and the "intensive technology" program. While wheat output decreased, coarse grain output was reported at record levels, up some 10 million tons. The increase in coarse grains relative to wheat reflects extensive replanting of winterkill wheat with spring barley and rain damage to spring wheat. Forecast 1987/88 USSR coarse grain imports are projected to drop for the third year in a row to 10 million tons, the lowest since 1976/77. Despite lower purchases in recent years, the USSR remains the second largest importer in the world after Japan, and its buying pattern has a very strong impact on the world market.

The outlook for Soviet imports is far from clear. Growth in feed demand is expected to continue strong. A commitment to increase meat production through improved feed rations will require increasing amounts of better quality grain, along with more protein feeds. Further gains in Soviet coarse grain production would not necessarily mean additional reductions in imports. High dockage and waste have always been a problem in the USSR, reducing quality and the amount of usable grain. Improving marketing

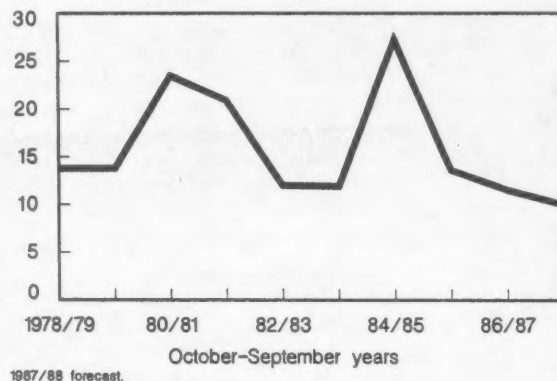
USSR Coarse Grain Production and Consumption

Million metric tons



USSR Coarse Grain Imports

Million metric tons



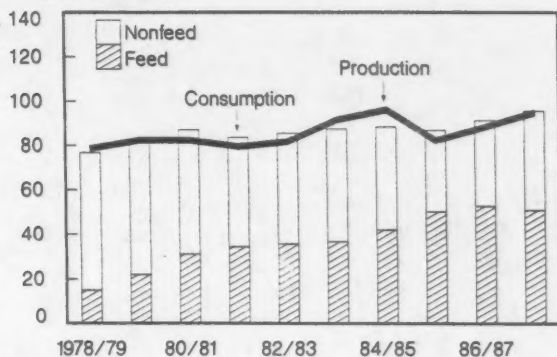
infrastructure could help reduce losses but this will be a slow and costly process.

China has been a net exporter of coarse grains for the last 5 years, but it may soon revert to being a net importer. Rising feed demand and tightening supplies resulted in a sharp jump in China's 1986/87 corn imports, from under 400,000 tons in 1985/86 to over 1.5 million. Two-thirds of this came from the United States. Meanwhile, China's corn exports fell 40 percent to 3.8 million tons, representing a decline in market share from 12 to 7 percent. For 1987/88, corn exports are forecast to hold steady at 3.8 million tons and imports to increase again to 2.7 million.

Despite expected strong growth in demand for meat, it appears that China will not be able to sustain the rapid growth in feed

China's Coarse Grain Production and Consumption

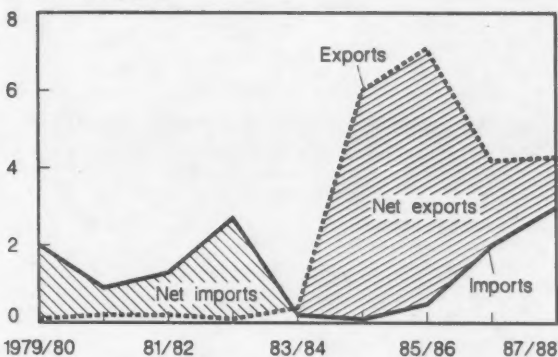
Million metric tons



1987/88 forecast.

China's Coarse Grain Trade

Million metric tons



1987/88 forecast.

use of the last decade. 1/ A pork shortage developed in late 1987 and rationing was reintroduced in some major cities. Pork producers apparently cut output as increases in feed prices outpaced those for pork. Although coarse grain area was up 3 percent in 1987, there is little likelihood of significant expansion because of limited land area and rising interest in non-grain crops. While coarse grain output may increase again in 1988, future gains will probably stem from improved yields and the government is trying to increase fertilizer use. Feed supplies in China will continue to be tight as growth in demand will likely exceed domestic output.

1/ This discussion is based on new USDA estimates of China's grain utilization.

U.S. Corn and Sorghum Exports Ahead of Last Year

Overall coarse grain exports from outside the United States will be down in 1987/88 to the lowest level in 8 years. Competitor corn shipments are forecast to drop another 12 percent below last year's depressed level. Argentina's exports are expected to rise 1 million tons to 5 million based on current production forecasts, but this would still be below the 1981/82 to 1985/86 average of 6.4 million. South Africa's exports are forecast to decline about 30 percent to 1.8 million tons. The outturn from their current crop will mainly affect exports for 1988/89. Thailand's supplies are apparently sold out, with exports reaching just 1 million tons. Eastern Europe's corn exports will also be down sharply. Among other significant exporters, only China and the EC are not expected to show year-to-year declines in 1987/88. China's main markets are Japan and the USSR, but it could pick up some additional sales to other Asian markets that normally buy Thai corn. Exports of EC corn to non-member countries will most likely go to North Africa and Eastern Europe.

Competitor barley and sorghum exports are also expected to be down, although not as sharply as for corn. EC barley exports are projected to increase over 20 percent to 7 million tons, Canada's to fall 20 percent to 4.8 million tons, and Australia's to be nearly unchanged at 2.1 million. However, aggregate shipments from other smaller exporters, such as Finland, are expected to drop 50 percent. For competitor sorghum, only Australia's exports are forecast to rise. Thailand's projected exports are very low, at 65,000 tons the lowest in nearly 2 decades. This reflects lower output and increasing domestic feed use in light of short corn and rice bran supplies.

One major unknown factor having a potential impact on world coarse grain trade is Thailand's very large stocks of cassava (also called manioc). This is mostly exported to the EC under quota at minimal tariffs. However, as demonstrated in past years, if the cassava price falls low enough, it can compete successfully with corn as a feed when used with supplemental protein meal. This occurred in 1985 when such markets as Japan, Korea, and the USSR took significant amounts.

U.S. export commitments to date (*U.S. Export Sales*, February 4, 1988) on a crop year basis are running 38 percent above last year's pace for corn and 13 percent for sorghum. Barley commitments are down 26 percent. For 1987/88, the U.S. market share for corn is forecast at 74.2 percent, up from 70 the previous year. Japan is the largest U.S. corn customer so far, followed by Taiwan and Korea. The pace of sales to all three of these markets is up substantially.

The EC recently bought 1.2 million tons of U.S. corn under the terms of the EC/U.S. Compensation Agreement. The February limit was extended to enable this sale to satisfy the 1987 requirement. Some corn gluten feed also counted against the required level of imports of 2 million tons of corn from outside the EC. Purchases of U.S. corn by the Soviet Union

total 1.7 million tons to date, with 4 million called for in the October-September year of the grain agreement between the 2 countries.

The U.S. share of the world sorghum market is forecast at 68.4 percent in 1987/88 compared to 63 in 1986/87. So far this year, Japan is easily the largest U.S. market, followed by Venezuela, Israel, and Mexico. Some sorghum sales are possible under EEP, with a recent initiative announced for Poland for sorghum/barley. However, most of the EEP for feed grains applies to barley. Exports under EEP account for most U.S. barley sales which are forecast to raise the U.S. share of the world barley market to 18.3 percent in 1987/88 from 16.4 the previous year. Important markets in 1987/88 to date include Saudi Arabia, Algeria, Iraq, and Bulgaria.

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Table 1.--Corn, sorghum, oats, barley: Farm price, planted acreage

Year Beginning Sep. 1*/	Farm price	CORN		Production	Yield per harvested acre
		Planted acreage	Harvested for grain		
	Dol./bu.	-- 1,000 acres --		1,000 bushels	Bushels
1950	1.52	82,859	72,398	2,764,071	38.2
1951	1.66	83,275	71,191	2,628,937	36.9
1952	1.52	82,230	71,353	2,980,793	41.8
1953	1.48	81,574	70,738	2,881,801	40.7
1954	1.43	82,185	68,668	2,707,913	39.4
1955	1.35	80,932	68,462	2,872,959	42.0
1956	1.29	77,828	64,877	3,075,336	47.4
1957	1.11	73,180	63,065	3,045,355	48.3
1958	1.12	73,351	63,549	3,356,205	52.8
1959	1.05	82,742	72,091	3,824,598	53.1
1960	1.00	81,425	71,422	3,906,949	54.7
1961	1.10	65,919	57,634	3,597,803	62.4
1962	1.12	65,017	55,726	3,606,311	64.7
1963	1.11	68,771	59,227	4,019,238	67.9
1964	1.17	65,823	55,369	3,484,253	62.9
1965	1.16	65,171	55,392	4,102,867	74.1
1966	1.24	66,347	57,002	4,167,608	73.1
1967	1.03	71,156	60,694	4,860,372	80.1
1968	1.08	65,126	55,980	4,449,542	79.5
1969	1.16	64,264	54,574	4,687,057	85.9
1970	1.33	66,863	57,358	4,152,243	72.4
1971	1.08	74,179	64,123	5,646,260	88.1
1972	1.57	67,126	57,513	5,579,832	97.0
1973	2.55	72,253	62,143	5,670,712	91.3
1974	3.02	77,935	65,405	4,701,402	71.9
1975	2.54	78,719	67,625	5,840,757	86.4
1976	2.15	84,588	71,506	6,289,169	88.0
1977	2.02	84,328	71,614	6,505,041	90.8
1978	2.25	81,675	71,930	7,267,927	101.0
1979	2.48	81,394	72,400	7,928,139	109.5
1980	3.12	84,043	72,961	6,639,396	91.0
1981	2.47	84,097	74,524	8,118,650	108.9
1982	2.55	81,857	72,719	8,235,101	113.2
1983	3.21	60,217	51,483	4,174,678	81.1
1984	2.63	80,543	71,915	7,674,020	106.7
1985	2.23	83,448	75,224	8,876,706	118.0
1986	1.50	76,674	69,159	8,249,864	119.3
1987		65,706	59,167	7,064,143	119.4

* Crop year began Oct. 1 prior to 1986.

age, harvested acreage, production, and yield, 1950 to date

SORGHUM				
	Farm price	Planted acreage	Harvested for grain	Production
				Yield per harvested acre
	Dol./cwt	-- 1,000 acres --	1,000 bushels	Bushels
1.88	16,055	10,346	233,536	22.6
2.36	15,028	8,544	162,863	19.1
2.82	12,289	5,326	90,741	17.0
2.36	14,590	6,295	115,719	18.4
2.25	20,148	11,718	235,575	20.1
1.74	23,921	12,891	242,638	18.8
2.05	21,384	9,209	204,881	22.2
1.74	26,886	19,682	567,506	28.8
1.78	20,675	16,524	581,012	35.2
1.53	19,508	15,406	555,441	36.1
1.49	19,598	15,601	619,954	39.7
1.80	14,294	10,985	480,208	43.7
1.82	15,060	11,571	510,284	44.1
1.74	17,516	13,326	585,394	43.9
1.88	16,770	11,742	489,796	41.7
1.76	17,079	13,029	672,698	51.6
1.82	16,372	12,813	714,992	55.8
1.77	18,945	14,988	755,344	50.4
1.69	17,793	13,890	731,277	52.6
1.91	17,231	13,437	729,919	54.3
2.04	16,957	13,568	683,179	50.4
1.86	20,547	16,142	867,997	53.8
2.45	17,035	13,212	801,350	60.7
3.82	18,994	15,700	923,224	58.8
4.95	17,588	13,809	622,711	45.1
4.23	18,080	15,403	754,354	49.0
3.62	18,143	14,466	710,797	49.1
3.25	16,636	13,797	780,944	56.6
3.59	16,197	13,410	731,270	54.5
4.19	15,277	12,901	807,422	62.6
5.19	15,639	12,513	579,343	46.3
4.01	15,930	13,677	875,835	64.0
4.41	16,028	14,137	835,083	59.1
4.89	11,880	10,001	487,521	48.7
4.15	17,254	15,355	866,241	56.4
3.45	18,285	16,782	1,120,271	66.8
2.45	15,336	13,859	938,124	67.7
	11,804	10,604	740,869	69.9

Continued--

Table 1.--Corn, sorghum, oats, barley: Farm price, planted acreage, ha

Year	Farm price	OATS		Production	Yield per harvested acre
		Planted acreage	Harvested for grain		
	Dol./bu.	-- 1,000 acres --		1,000 bushels	Bushels
1950	0.79	45,044	39,306	1,369,199	34.8
1951	.82	41,015	35,233	1,277,647	36.3
1952	.79	42,341	37,012	1,217,433	32.9
1953	.74	43,220	37,536	1,153,205	30.7
1954	.71	46,898	40,551	1,409,601	34.8
1955	.60	47,494	39,027	1,495,978	38.3
1956	.69	44,205	33,333	1,151,398	34.5
1957	.61	41,840	34,065	1,289,880	37.9
1958	.58	37,699	31,247	1,401,410	44.8
1959	.65	35,064	27,758	1,050,051	37.8
1960	.60	31,419	26,588	1,153,332	43.4
1961	.64	32,314	23,886	1,010,314	42.3
1962	.62	29,500	22,377	1,012,197	45.2
1963	.62	28,054	21,308	965,510	45.3
1964	.63	25,634	19,759	852,257	43.1
1965	.62	24,046	18,522	929,554	50.2
1966	.67	23,343	17,877	803,324	44.9
1967	.66	20,719	16,110	793,800	49.3
1968	.60	23,342	17,708	950,689	53.7
1969	.58	23,561	17,971	965,863	53.7
1970	.62	24,410	18,594	915,236	49.2
1971	.60	21,831	15,705	878,079	55.9
1972	.72	19,990	13,410	690,616	51.5
1973	1.18	18,605	13,770	659,136	47.9
1974	1.53	17,013	12,608	600,655	47.6
1975	1.46	16,434	13,038	638,960	49.0
1976	1.56	16,620	11,834	540,441	45.7
1977	1.09	17,732	13,485	752,774	55.8
1978	1.20	16,407	11,126	581,657	52.3
1979	1.33	13,960	9,682	526,748	54.4
1980	1.72	13,381	8,657	458,792	53.0
1981	1.88	13,632	9,407	509,529	54.2
1982	1.49	13,951	10,258	592,630	57.8
1983	1.62	20,289	9,072	476,961	52.6
1984	1.67	12,414	8,163	473,661	58.0
1985	1.23	13,255	8,177	520,800	63.7
1986	1.21	14,691	6,860	386,356	56.3
1987 ^{1/}		17,959	6,925	373,765	54.0

^{1/} Preliminary.

Note: Revised prices received by farmers, 1979 to date reflecting January on U.S. monthly prices weighted by monthly marketings. Prices do not include

Source: Agricultural Statistics Board, National Agricultural Statistics Service

age, harvested acreage, production, and yield, 1950 to date—continued

Year	Price per bushel	BARLEY			Yield per harvested acre
		Farm price	Planted acreage	Harvested for grain	
Year	Dol./bu.	-- 1,000 acres --	1,000 bushels	Bushels	
1950	1.19	13,010	11,155	303,772	27.2
1951	1.26	10,790	9,424	257,213	27.3
1952	1.37	9,190	8,236	228,168	27.7
1953	1.17	9,615	8,680	246,723	28.4
1954	1.09	14,740	13,370	379,254	28.4
1955	.92	16,293	14,523	403,065	27.8
1956	.99	14,732	12,852	376,661	29.3
1957	.89	16,398	14,872	442,761	29.8
1958	.90	16,150	14,791	477,368	32.3
1959	.86	16,766	14,869	420,203	28.3
1960	.84	15,527	13,856	429,005	31.0
1961	.98	15,623	12,806	392,441	30.6
1962	.92	14,380	12,214	427,726	35.0
1963	.90	13,452	11,236	392,833	35.0
1964	.95	11,652	10,277	386,059	37.6
1965	1.02	10,123	9,166	393,055	42.9
1966	1.06	11,184	10,250	392,108	38.3
1967	1.01	10,077	9,230	373,745	40.5
1968	.92	10,486	9,732	426,151	43.8
1969	.89	10,291	9,557	427,055	44.7
1970	.97	10,476	9,712	416,091	42.8
1971	.99	11,061	10,104	462,423	45.8
1972	1.21	10,567	9,645	421,719	43.7
1973	2.14	11,045	10,295	417,434	40.5
1974	2.81	8,713	7,930	298,669	37.7
1975	2.42	9,373	8,617	379,162	44.0
1976	2.25	9,301	8,439	383,007	45.4
1977	1.78	10,778	9,728	427,784	44.0
1978	1.92	9,989	9,248	454,759	49.2
1979	2.27	8,116	7,527	383,201	50.9
1980	2.79	8,320	7,260	361,135	49.7
1981	2.48	9,618	9,038	473,512	52.4
1982	2.18	9,549	9,013	515,935	57.2
1983	2.47	10,422	9,731	508,925	52.3
1984	2.29	11,957	11,231	599,204	53.4
1985	1.98	13,156	11,603	591,383	51.0
1986	1.61	13,059	12,007	610,522	50.8
1987		11,046	10,027	527,010	52.6

January 30, 1987 Agricultural Prices report. U.S. average prices based not include an allowance for loans outstanding and government purchases.

Statistics Service, USDA.

Table 2.—Feed grains: Marketing year supply and

Year 2/	Supply				Domestic use		
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Seed	Feed
							Million m
1975/76	21.1	185.0	0.4	206.5	16.5	1.5	
1976/77	23.9	194.0	0.3	218.2	17.1	1.6	
1977/78	36.9	205.3	0.3	242.5	18.0	1.5	
1978/79	50.3	221.5	0.3	272.1	19.2	1.4	
1979/80	57.7	237.9	0.3	295.9	20.0	1.4	
1980/81	63.8	197.9	0.3	262.0	22.1	1.3	
1981/82	44.2	246.2	0.3	290.7	24.0	1.4	
1982/83	78.0	250.2	0.3	328.5	26.5	1.4	
1983/84	108.6	136.4	0.7	245.7	28.3	1.5	
1984/85	39.6	236.9	0.8	277.3	30.6	1.5	
1985/86	57.5	274.4	0.9	332.7	33.5	1.5	
1986/87	126.3	252.3	0.7	379.3	34.3	1.2	
1987/88 4/	151.8	215.2	0.7	367.6	- - 36.4 - -		

1/ Aggregated data on corn, sorghum, barley, and oats. 2/ The marketing year for corn, sorghum, and oats is September 1 to August 31; for barley, June 1. 3/ Includes total Government loans (original and resale).

Supply and disappearance, 1975/76-1987/88 1/

Disappearance			Ending stocks	
Feed use	:	Total	Privately:	Total
Feed and	:	Exports	Govt. owned	3/
residual	:	disappearance	owned	:

Million metric tons

1975/76	115.4	133.4	49.2	182.6	0.4	23.5	23.9
1976/77	112.5	131.2	50.1	181.3	---	36.9	36.9
1977/78	117.1	136.6	55.6	192.2	0.2	50.1	50.3
1978/79	134.3	154.9	59.5	214.4	3.8	53.9	57.7
1979/80	139.7	161.1	71.0	232.1	7.8	56.0	63.8
1980/81	123.9	147.3	70.5	217.8	7.3	36.9	44.2
1981/82	127.4	152.8	59.9	212.7	8.3	69.7	78.0
1982/83	139.0	166.9	53.0	219.9	33.5	75.1	108.6
1983/84	119.7	149.5	56.6	206.1	8.0	31.6	39.6
1984/85	131.1	163.2	56.6	219.8	8.9	48.6	57.5
1985/86	134.8	169.8	36.6	206.4	20.4	105.9	126.3
1986/87	145.8	181.2	46.3	227.5	48.8	103.0	151.8
1987/88	149.5	185.9	51.6	237.5			130.1

Marketing year for corn and sorghum begins September 1; for oats and
wheat (see table 4/ Projected.

Table 3.—Foreign coarse grains: Supply and disappearance, 1975/76 - 1987/88 1/

Year	Beginning stocks	Production	Disappearance		Imports	Adjusted Imports 2/	Ending stocks
			Feed	Total			
CORN							
Million metric tons							
1975/76	31.7	191.1	122.6	230.0	60.7	NA	36.4
1976/77	36.4	196.1	120.7	234.4	59.2	NA	38.9
1977/78	38.9	199.9	131.7	249.6	68.2	NA	40.1
1978/79	40.1	207.2	137.6	258.9	69.9	NA	41.1
1979/80	41.1	223.7	159.2	281.3	79.1	73.9	45.8
1980/81	45.8	239.9	168.5	291.7	79.1	78.1	48.9
1981/82	48.9	235.0	176.2	295.6	77.6	67.3	43.8
1982/83	43.8	230.3	174.9	289.4	73.2	63.3	38.6
1983/84	38.6	241.5	168.3	286.2	64.8	61.1	39.4
1984/85	39.4	264.0	184.7	303.5	72.5	66.5	46.8
1985/86	46.8	254.8	187.3	292.5	62.0	54.5	40.4
1986/87 3/	40.4	266.6	193.6	306.3	61.4	56.3	37.9
1987/88 4/	37.9	261.2	188.0	310.0	68.1	58.2	35.0
SORGHUM							
1975/76	7.3	44.7	18.5	49.2	10.2	NA	7.2
1976/77	7.2	44.1	22.1	50.7	12.4	NA	7.2
1977/78	7.2	44.6	21.0	49.3	10.9	NA	7.4
1978/79	7.4	45.0	22.2	50.8	11.1	NA	7.3
1979/80	7.3	41.0	21.5	50.6	12.4	11.6	6.9
1980/81	6.9	44.9	23.5	49.6	12.8	14.1	8.1
1981/82	8.1	48.2	28.5	55.7	14.3	13.7	7.4
1982/83	7.4	43.9	25.2	51.1	12.3	11.6	6.1
1983/84	6.1	46.5	25.8	52.9	13.1	13.0	6.5
1984/85	6.5	44.2	26.3	52.0	12.9	13.1	6.1
1985/86	6.1	42.2	25.2	48.6	9.6	8.7	5.1
1986/87 3/	5.1	40.6	23.1	45.9	8.0	8.0	4.5
1987/88 4/	4.5	39.0	23.8	45.8	9.9	8.4	4.4
BARLEY							
1975/76	20.1	132.9	92.1	135.8	13.5	NA	18.0
1976/77	18.0	166.5	112.6	164.4	13.5	NA	21.2
1977/78	21.2	154.6	108.3	157.6	14.4	NA	18.5
1978/79	18.5	173.5	117.1	168.9	13.5	NA	21.9
1979/80	21.9	152.4	113.1	160.2	16.6	11.3	16.9
1980/81	16.9	155.4	107.5	156.0	16.3	14.0	17.1
1981/82	17.1	144.9	105.5	149.6	20.4	14.1	14.4
1982/83	14.4	155.6	107.9	152.9	17.2	13.3	17.9
1983/84	17.9	153.6	115.4	158.9	20.3	16.5	13.0
1984/85	13.0	161.7	115.9	157.6	23.1	18.0	18.7
1985/86	18.7	164.5	120.4	162.0	22.2	18.4	22.1
1986/87 3/	22.1	168.8	125.5	168.6	24.8	18.0	25.7
1987/88 4/	25.7	174.3	130.1	178.7	21.6	17.8	23.7
TOTAL COARSE GRAINS 5/							
1975/76	69.5	463.6	277.7	510.5	86.5	75.2	71.3
1976/77	71.3	510.1	305.8	551.9	87.6	83.9	78.3
1977/78	78.3	495.2	306.5	554.2	95.7	89.0	75.3
1978/79	75.3	533.3	329.2	584.8	96.9	93.1	81.0
1979/80	81.0	506.0	336.1	583.7	110.6	99.5	77.4
1980/81	77.4	533.6	342.3	591.3	110.3	108.3	81.5
1981/82	81.5	519.7	352.1	593.0	114.6	97.8	72.8
1982/83	72.8	533.2	357.5	593.4	104.0	90.0	72.7
1983/84	72.7	550.1	365.3	604.1	100.1	93.3	70.5
1984/85	70.5	576.8	378.8	617.5	111.1	100.4	85.1
1985/86	85.1	568.1	389.3	609.5	95.8	83.2	80.8
1986/87 3/	80.8	580.0	395.2	623.8	96.0	83.6	81.7
1987/88 4/	81.7	576.6	392.4	636.2	101.4	86.5	76.3

NA = not available.

1/ Aggregated on basis of local marketing years, except for adjusted imports. 2/ Based on Oct/Sept. trade year and excludes intra-EC trade. 3/ Preliminary. 4/ Forecast.

5/ Also includes oats, rye, millet, and mixed grains.

Source: Compiled from World Grain Situation and Outlook, FAS, and USDA data.



Table 4.—Corn: Marketing year supply and demand

Year beginning September 1	Supply				Domestic	
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Seed
						MI
1976/77						
Sept.-Nov.	633.2	6,289.2	0.5	6,922.9	130.3	---
Dec.-Feb.	5,387.2	---	0.4	5,387.6	117.9	---
Mar.-May	3,848.2	---	0.6	3,848.8	131.9	16.1
June-Aug.	2,370.0	---	1.0	2,371.0	142.0	4.0
Mkt. year	633.2	6,289.2	2.5	6,924.9	522.1	20.1
1977/78						
Sept.-Nov.	1,135.6	6,505.0	0.7	7,641.3	138.9	---
Dec.-Feb.	6,086.7	---	0.7	6,087.4	128.6	---
Mar.-May	4,481.6	---	0.6	4,482.2	141.7	15.6
June-Aug.	2,861.1	---	0.6	2,861.7	152.3	3.9
Mkt. year	1,135.6	6,505.0	2.6	7,643.2	561.5	19.5
1978/79						
Sept.-Nov.	1,435.9	7,267.9	0.2	8,704.0	146.7	---
Dec.-Feb.	6,928.2	---	0.4	6,928.6	135.1	---
Mar.-May	5,151.1	---	0.3	5,151.4	157.5	15.6
June-Aug.	3,287.2	---	0.4	3,287.6	149.2	3.9
Mkt. year	1,435.9	7,267.9	1.3	8,705.1	588.5	19.5
1979/80						
Sept.-Nov.	1,709.5	7,928.1	0.3	9,637.9	151.5	---
Dec.-Feb.	7,594.1	---	0.2	7,594.3	140.3	---
Mar.-May	5,557.0	---	0.2	5,557.2	159.6	16.0
June-Aug.	3,644.3	---	0.2	3,644.5	168.1	4.0
Mkt. year	1,709.5	7,928.1	0.9	9,638.5	619.5	20.0
1980/81						
Sept.-Nov.	2,034.3	6,639.4	0.5	8,674.2	168.7	---
Dec.-Feb.	6,595.9	---	0.2	6,596.1	158.0	---
Mar.-May	4,662.4	---	0.2	4,662.6	181.7	16.2
June-Aug.	2,773.5	---	0.5	2,774.0	189.4	4.0
Mkt. year	2,034.3	6,639.4	1.4	8,675.1	697.8	20.2
1981/82						
Sept.-Nov.	1,392.1	8,118.7	0.2	9,511.0	188.8	---
Dec.-Feb.	7,601.1	---	0.4	7,601.5	180.2	---
Mar.-May	5,766.4	---	0.2	5,766.6	201.9	16.0
June-Aug.	3,880.1	---	0.3	3,880.4	206.9	3.4
Mkt. year	1,392.1	8,118.7	1.1	9,511.9	777.8	19.4

and disappearance, specified periods, 1975/76-1986/87

Disappearance				Ending stocks			
Domestic use			Total	Privately:			Total
d: Seed	Feed and residual	Total	Exports	disappearance	Govt. owned	owned	Total
:	:	:	:	:	:	1/	:
Million bushels							
---	933.9	1,064.2	471.5	1,535.7	0.2	5,387.0	5,387.2
---	1,036.2	1,154.1	385.3	1,539.4	0.1	3,848.1	3,848.2
16.1	897.2	1,045.2	433.6	1,478.8	0.3	2,369.7	2,370.0
4.0	723.1	869.1	366.3	1,235.4	0.2	1,135.4	1,135.6
20.1	3,590.4	4,132.6	1,656.7	5,789.3	0.2	1,135.4	1,135.6
---	1,013.5	1,152.4	402.2	1,554.6	0.2	6,086.5	6,086.7
---	1,066.4	1,195.0	410.8	1,605.8	0.4	4,481.2	4,481.6
15.6	935.6	1,092.9	528.2	1,621.1	0.4	2,860.7	2,861.1
3.9	701.7	857.9	567.9	1,425.8	3.5	1,432.4	1,435.9
19.5	3,717.2	4,298.2	1,909.1	6,207.3	3.5	1,432.4	1,435.9
---	1,157.9	1,304.6	471.2	1,775.8	60.3	6,867.9	6,928.2
---	1,226.7	1,361.8	415.7	1,777.5	95.2	5,055.9	5,151.1
15.6	1,133.6	1,306.7	557.5	1,864.2	100.6	3,186.6	3,287.2
3.9	745.7	898.8	679.3	1,578.1	100.5	1,609.0	1,709.5
19.5	4,263.9	4,871.9	2,123.7	6,995.6	100.5	1,609.0	1,709.5
---	1,267.5	1,419.0	624.8	2,043.8	99.6	7,494.5	7,594.1
---	1,296.2	1,436.5	600.8	2,037.3	100.1	5,456.9	5,557.0
16.0	1,146.1	1,321.7	591.2	1,912.9	213.5	3,430.8	3,644.3
4.0	839.5	1,011.6	598.6	1,610.2	260.1	1,774.2	2,034.3
20.0	4,549.3	5,188.8	2,415.4	7,604.2	260.1	1,774.2	2,034.3
---	1,217.9	1,386.6	691.7	2,078.3	256.7	6,339.2	6,595.9
---	1,126.3	1,284.3	649.4	1,933.7	252.3	4,410.1	4,662.4
16.2	1,072.4	1,270.3	618.8	1,889.1	251.6	2,521.9	2,773.5
4.0	740.5	933.9	448.0	1,381.9	241.8	1,150.3	1,392.1
20.2	4,157.1	4,875.1	2,407.9	7,283.0	241.8	1,150.3	1,392.1
---	1,198.4	1,387.2	522.7	1,909.9	243.6	7,357.5	7,601.1
---	1,102.0	1,362.2	472.9	1,835.1	259.3	5,507.1	5,766.4
16.0	1,069.6	1,287.5	599.0	1,886.5	269.7	3,610.4	3,880.1
3.4	718.6	920.9	414.9	1,343.8	280.1	2,256.5	2,536.6
19.4	4,168.6	4,965.8	2,009.5	6,975.3	280.1	2,256.5	2,536.6

Continued—

Table 4.—Corn: Marketing year supply and disappearance

Year beginning September 1	Supply				Domestic use	
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Seed
						Millions of bushels
1982/83						
Sept.-Nov.	2,536.6	8,235.1	0.3	10,772.0	217.5	---
Dec.-Feb.	8,906.3	---	0.1	8,906.4	201.6	---
Mar.-May	6,899.2	---	0.2	6,899.4	226.6	11.6
June-Aug.	4,923.9	---	0.1	4,924.0	234.6	2.9
Mkt. year	2,536.6	8,235.1	0.7	10,772.4	880.3	14.5
1983/84						
Sept.-Nov.	3,523.1	4,174.7	0.5	7,698.3	238.6	---
Dec.-Feb.	5,651.7	---	0.6	5,652.3	222.8	---
Mar.-May	3,865.0	---	1.0	3,866.0	247.3	16.8
June-Aug.	2,145.1	---	0.6	2,145.7	247.3	2.3
Mkt. year	3,523.1	4,174.7	2.7	7,700.5	956.0	19.1
1984/85						
Sept.-Nov.	1,006.3	7,674.0	0.9	8,681.2	249.7	---
Dec.-Feb.	6,631.1	---	0.4	6,631.5	241.5	---
Mar.-May	4,623.2	---	1.1	4,624.3	283.8	17.0
June-Aug.	2,835.5	---	1.1	2,836.6	295.0	4.2
Mkt. year	1,006.3	7,674.0	3.5	8,683.8	1,070.0	21.2
1985/86						
Sept.-Nov.	1,648.2	8,876.7	1.0	10,525.9	278.0	---
Dec.-Feb.	8,614.7	---	1.3	8,616.0	264.0	---
Mar.-May	6,587.1	---	2.3	6,589.4	293.0	16.1
June-Aug.	4,990.0	---	6.0	4,996.0	305.0	3.4
Mkt. year	1,648.2	8,876.7	10.6	10,535.5	1,140.0	19.5
1986/87						
Sept.-Nov.	4,039.5	8,249.9	0.8	12,290.2	280.0	---
Dec.-Feb.	10,305.5	---	0.3	10,305.8	270.0	---
Mar.-May	8,248.2	---	.5	8,248.7	310.0	15.4
June-Aug.	6,332.2	---	.5	6,332.7	315.0	.2
Mkt. year	4,039.5	8,249.9	2.1	12,291.5	1,175.0	15.6
1987/88						
Sept.-Nov.	4,881.7	7,064.1	.5	11,946.3	292.0	---
Mkt. year	4,881.7	7,064.1	2.0	11,947.8	---	1225.0

appearance, specified periods, 1982/83 to date--continued

Disappearance				Ending stocks			
Domestic use			Total		Privately:		
Seed	Feed	Exports	disap-	Govt.	owned	Total	
and	and		pearance:	owned	I/		
residual							

Million bushels

---	1,202.0	1,419.5	446.2	1,865.7	372.0	8,534.3	8,906.3
---	1,293.6	1,495.2	512.0	2,007.2	470.8	6,428.4	6,899.2
11.6	1,258.3	1,496.5	479.0	1,975.5	491.7	4,432.2	4,923.9
2.9	766.8	1,004.3	396.6	1,400.9	1,142.7	2,380.4	3,523.1
14.5	4,520.7	5,415.5	1,833.8	7,249.3	1,142.7	2,380.4	3,523.1
---	1,311.0	1,549.6	497.0	2,046.6	1,227.0	4,424.7	5,651.7
---	1,056.0	1,278.8	508.5	1,787.3	1,214.0	2,651.0	3,865.0
16.8	939.5	1,203.6	517.3	1,720.9	195.0	1,950.1	2,145.1
2.3	511.1	760.7	378.7	1,139.4	201.5	804.8	1,006.3
19.1	3,817.6	4,792.7	1,901.5	6,694.2	201.5	804.8	1,006.3
---	1,294.2	1,543.9	506.2	2,050.1	206.7	6,424.4	6,631.1
---	1,182.9	1,424.4	583.9	2,008.3	209.7	4,413.5	4,623.2
17.0	1,009.1	1,309.9	478.9	1,788.8	221.7	2,613.8	2,835.5
4.2	592.8	892.0	296.4	1,188.4	224.9	1,423.3	1,648.2
21.2	4,079.0	5,170.2	1,865.4	7,035.6	224.9	1,423.3	1,648.2
---	1,215.5	1,493.5	417.7	1,911.2	388.6	8,226.1	8,614.7
---	1,299.6	1,563.6	465.3	2,028.9	509.4	6,077.7	6,587.1
16.1	1,085.9	1,395.0	204.4	1,599.4	550.9	4,439.1	4,990.0
3.4	494.3	802.7	153.8	956.5	545.7	3,493.8	4,039.5
19.5	4,095.3	5,254.8	1,241.2	6,496.0	545.7	3,493.8	4,039.5
---	1,383.6	1,663.6	321.1	1,984.7	968.2	9,335.9	10,305.5
---	1,472.2	1,742.2	315.4	2,057.6	1,362.2	5,884.6	8,248.2
15.4	1,090.9	1,416.3	500.2	1,916.5	1,491.5	4,840.7	6,332.2
.2	768.1	1,083.3	367.7	1451.0	1,443.0	3,439.0	4,881.7
15.6	4,714.8	5,905.4	1,504.4	7,409.8	1,443.0	3,439.0	4,881.7
---	1,489.4	1,781.4	398.0	2,179.4	1,683.4	8,083.5	9,766.9
225.0	4,900.0	6125.0	1,700.0	7,825.0			4,122.8

Table 5.--Sorghum: Marketing year supply and disappearance, 1975/76 through 1981/82

Year beginning September 1	Supply				Disappearance		
	Beginning stocks	Production	Imports	Total	Domestic use		
					Food, alcohol, and industrial	Seed	Feed and residual
							Million bushels
1975/76							
Sept.-May	65.3	754.4	0	819.7	6.9	1.6	477.4
June-Aug.	154.0	0	0	154.0	1.9	0.7	16.7
Mkt. year	65.3	754.4	0	819.7	8.8	2.3	494.1
1976/77							
Sept.-May	82.3	710.8	0	793.1	6.7	1.4	385.0
June-Aug.	195.7	0	0	195.7	1.9	0.6	26.2
Mkt. year	82.3	710.8	0	793.1	8.6	2.0	411.2
1977/78							
Sept.-May	117.3	780.9	0	898.2	7.1	1.4	393.7
June-Aug.	319.1	0	0	319.1	2.3	0.6	53.8
Mkt. year	117.3	780.9	0	898.2	9.4	2.0	447.5
1978/79							
Sept.-May	216.4	731.3	0	947.7	7.7	1.3	465.9
June-Aug.	322.2	0	0	322.2	2.3	0.5	72.0
Mkt. year	216.4	731.3	0	947.7	10.0	1.8	537.9
1979/80							
Sept.-May	207.9	807.4	0	1,015.3	8.3	1.4	460.8
June-Aug.	277.6	0	0	277.6	2.1	0.6	34.6
Mkt. year	207.9	807.4	0	1,015.3	10.4	2.0	495.4
1980/81							
Sept.-May	177.9	579.3	0	757.2	7.2	1.4	352.6
June-Aug.	184.5	0	0	184.5	1.9	0.6	-29.9
Mkt. year	177.9	579.3	0	757.2	9.1	2.0	322.7
1981/82							
Sept.-May	130.3	875.8	0	1,006.1	6.8	1.4	413.5
June-Aug.	379.5	0	0	379.5	2.0	0.6	3.5
Mkt. year	130.3	875.8	0	1,006.1	8.8	2.0	417.0

Disappearance, specified periods, 1975/76-1986/87

Disappearance				Ending stocks		
			Total	Govt.	Privately	Total
Seed	Exports	disap-	Govt.	owned		
and	Total	pearance	owned	1/		
individual						

bushels

77.4	485.9	179.8	665.7	0	154.0	154.0
16.7	19.3	52.4	71.7	0	82.3	82.3
94.1	505.2	232.2	737.4	0	82.3	82.3
85.0	393.1	204.3	597.4	0.3	195.4	195.7
26.2	28.7	49.7	78.4	0.2	117.1	117.3
11.2	421.8	254.0	675.8	0.2	117.1	117.3
93.7	402.2	176.9	579.1	0.3	318.8	319.1
53.8	56.7	46.0	102.7	5.0	211.4	216.4
47.5	458.9	222.9	681.8	5.0	211.4	216.4
65.9	474.9	150.6	625.5	42.8	279.4	322.2
72.0	74.8	39.5	114.3	43.7	164.2	207.9
537.9	549.7	190.1	739.8	43.7	164.2	207.9
60.8	470.5	267.2	737.7	45.6	232.0	277.6
34.6	37.3	62.4	99.7	45.6	132.3	177.9
495.4	507.8	329.6	837.4	45.6	132.3	177.9
52.6	361.2	211.5	572.7	43.8	140.7	184.5
-29.9	-27.4	81.6	54.2	41.5	88.8	130.3
322.7	333.8	293.1	626.9	41.5	88.8	130.3
413.5	421.7	204.9	626.6	38.3	341.2	379.5
3.5	6.1	54.8	60.9	41.8	276.8	318.6
417.0	427.8	259.7	687.5	41.8	276.8	318.6

Continued--

Table 5.--Sorghum: Marketing year supply and disappearance, s

Year beginning September 1	Supply				Domestic use			Dis-
	Begin- ning stocks	Produc- tion	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residu	
								Million bu
1982/83								
Sept.-May	318.6	835.1	0	1,153.7	6.0	0.9	453.	
June-Aug.	529.1	0	0	529.1	1.9	0.9	41.	
Mkt. year	318.6	835.1	0	1,153.7	7.9	1.8	494.	
1983/84								
Sept.-May	439.1	487.5	0	926.6	5.7	1.1	356.	
June-Aug.	368.9	0	0.1	369.0	2.0	1.2	28.	
Mkt. year	439.1	487.5	0.1	926.7	7.7	2.3	384.	
1984/85								
Sept.-May	287.4	866.2	0.1	1,153.7	12.4	1.5	542.	
June-Aug.	360.8	0	0	360.8	2.9	0.5	-2.	
Mkt. year	287.4	866.2	0.1	1,153.7	15.3	2.0	539.	
1985/86								
Sept.-May	300.2	1,120.3	0	1,420.5	22.1	1.2	626.	
June-Aug.	630.0	0	0	630.0	3.9	0.5	36.	
Mkt. year	300.2	1,120.3	0	1,420.5	26.0	1.7	663.	
1986/87								
Sept.-May	551.0	938.1	0	1,489.1	11.0	1.0	498.	
June-Aug.	823.7	0	0	823.7	2.0	.6	46.	
Mkt. year	551.0	941.6	0	1,492.6	13.0	1.6	544.	
1987/88								
Mkt. year <u>2/</u>	731.5	740.9	0	1,472.4	-15.0	-	550	

1/ Includes quantity under loan and farmer-owned reserve. 2/ Projected.

Disappearance, specified periods, 1982/83 to date--continued

Disappearance				Ending stocks			
use	:	:	Total	:	Privately:	:	Total
: Feed	:	:Exports	: disap-	:Govt.	: owned	:	
: and	Total	:	:pearance	owned	1/	:	
:residual	:	:	:	:	:	:	

million bushels

453.5	460.4	164.2	642.6	54.0	475.1	529.1
41.3	44.1	45.9	90.0	171.5	267.6	439.1
494.8	504.5	210.1	714.6	171.5	267.6	439.1
356.5	363.3	194.4	557.7	78.0	290.9	368.9
28.2	31.4	50.2	81.6	102.8	184.6	287.4
384.7	394.7	244.6	639.3	102.8	184.6	287.4
542.2	556.1	236.8	792.9	111.1	249.7	360.8
-2.9	0.5	60.1	60.6	112.1	188.1	300.2
539.3	556.6	296.9	853.5	112.1	188.1	300.2
626.9	650.2	140.3	790.5	181.4	447.5	630.0
36.9	41.3	37.7	79.0	207.2	343.8	551.0
663.8	691.5	178.0	869.5	207.2	343.8	551.0
498.6	510.6	154.8	665.4	400.4	423.3	823.7
46.1	48.7	43.5	92.2			731.5
544.7	559.3	198.3	757.6	408.9	322.6	731.5
550.0	565.0	225.0	790.0			682.4

ted.

Table 6.--Barley: Marketing year supply and disappearance

Year beginning June 1	Supply				Domestic use		
	Beginning	Production	Imports	Total	Food, alcohol, and industrial	Seed	Reserve
	stocks	tion	:	:	:	:	:
Million							
1975/76	92.0	379.2	15.7	486.9	130.5	15.7	
1976/77	128.4	383.0	10.8	522.2	137.0	18.2	
1977/78	126.4	427.8	9.4	563.6	138.6	16.7	
1978/79	173.1	454.8	10.5	638.4	153.7	13.6	
1979/80	228.0	383.2	11.8	623.0	157.9	14.0	
1980/81	192.1	361.1	10.2	563.4	162.3	13.2	
1981/82	137.3	473.5	9.6	620.4	158.0	16.3	
1982/83	147.8	515.9	10.7	674.4	152.7	17.4	
1983/84	216.7	508.9	7.1	732.7	149.5	19.5	
1984/85	189.4	599.2	10.1	798.7	149.0	21.6	
1985/86	247.4	591.4	9.0	847.8	147.2	21.4	
1986/87	324.8	610.5	8.7	944.0	156.1	17.9	
1987/88 ^{3/}	335.6	527.0	5.3	867.9	- 175.0 -		

^{1/} Quarterly supply and disappearance estimates discontinued because barley was not marketed in 1987/88.
^{2/} Includes quantity under loan and farmer-owned reserve. ^{3/} Projected.

Table 7.--Oats: Marketing year supply and disappearance

Year beginning June 1	Supply				Domestic use		
	Beginning	Production	Imports	Total	Food and industrial	Seed	Reserve
	stocks	tion	:	:	:	:	:
Million							
1975/76	224.0	639.0	0.7	863.7	44.0	42.7	
1976/77	204.8	540.4	1.4	746.6	42.4	45.9	
1977/78	164.3	752.8	2.2	919.3	42.0	42.5	
1978/79	313.1	581.7	0.7	895.5	41.0	36.1	
1979/80	280.0	526.7	0.9	807.6	40.7	34.6	
1980/81	236.4	458.8	1.3	696.5	41.0	33.0	
1981/82	177.0	509.5	1.6	688.1	41.2	35.4	
1982/83	151.9	592.6	3.9	748.4	41.7	43.3	
1983/84	219.8	477.0	30.1	726.9	40.9	31.9	
1984/85	181.1	473.7	34.0	688.8	41.0	34.6	
1985/86	179.9	520.8	27.5	728.2	44.0	38.4	
1986/87	183.7	386.4	33.3	603.4	45.0	28.1	
1987/88 ^{3/}	132.7	373.8	35.0	541.5	- 75.0 -		

^{1/} Quarterly supply and disappearance estimates discontinued because oats were not marketed in 1987/88.
^{2/} Includes quantity under loan and farmer-owned reserve. ^{3/} Projected.

disappearance, area, and prices, 1975/76-1987/88 1/

Disappearance				Ending stocks May 31			
Domestic use	:	Total	:	Govt.	Privately:	Total	
Feed	:	Exports	disap-	owned	owned		
Seed	and	Total	pearance	owned	2/		
Residual	:	:	:	:	:	:	:

Million bushels

5.7	188.5	334.7	23.8	358.5	---	128.4	128.4
8.2	174.4	329.6	66.2	395.8	---	126.4	126.4
6.7	178.0	333.3	57.2	390.5	---	173.1	173.1
3.6	217.4	384.7	25.7	410.4	2.5	225.5	228.0
4.0	204.2	376.1	54.8	430.9	3.2	188.9	192.1
3.2	173.9	349.4	76.7	426.1	3.4	133.9	137.3
6.3	198.2	372.5	100.1	472.6	3.3	144.5	147.8
7.4	240.4	410.5	47.2	457.7	6.0	210.7	216.7
9.5	282.8	451.8	91.5	543.3	11.9	177.5	189.4
21.6	303.9	474.5	76.8	551.3	14.6	232.8	247.4
21.4	332.6	501.2	21.8	523.0	57.4	267.4	324.8
7.9	277.7	471.7	136.7	608.4	75.5	260.9	335.6
	275.0	450.0	125.0	575.0			292.9

Because barley has been dropped from quarterly grain stocks survey.
ected.

disappearance, area, and prices, 1975/76-1987/88 1/

Disappearance				Ending stocks May 31			
Domestic use	:	Total	:	Govt.	Privately:	Total	
Feed	:	Exports	disap-	owned	owned		
Seed	and	Total	pearance	owned	2/		
Residual	:	:	:	:	:	:	:

Million bushels

42.7	558.5	645.2	13.7	658.9	24.9	179.9	204.8
45.9	484.4	572.7	9.6	582.3	---	164.3	164.3
42.5	509.4	593.9	12.3	606.2	---	313.1	313.1
36.1	525.7	602.8	12.7	615.5	2.7	277.3	280.0
34.6	491.8	567.1	4.1	571.2	2.7	233.7	236.4
33.0	432.2	506.2	13.3	519.5	2.3	174.7	177.0
35.4	453.0	529.6	6.6	536.2	0.7	151.2	151.9
43.3	440.6	525.6	3.0	528.6	0.7	219.1	219.8
31.9	470.9	543.7	2.1	545.8	1.5	179.6	181.1
34.6	432.0	507.6	1.3	508.9	1.4	178.5	179.9
38.4	459.9	542.3	2.2	544.5	1.9	181.8	183.7
28.1	394.8	467.9	2.8	470.7	3.5	129.2	132.7
	350.0	425.0	1.0	426.0			115.5

Because oats has been dropped from quarterly grain stocks survey.
ected.

Table 8.--Average prices received by farmers, United States, by months, and loan rate, 1970-87 1/

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average 2/	Loan rate
Corn														
Dollars per bushel														
1970	1.38	1.34	1.29	1.36	1.42	1.43	1.43	1.41	1.38	1.43	1.36	1.19	1.33	1.05
1971	1.11	1.00	.97	1.08	1.09	1.09	1.10	1.13	1.15	1.13	1.14	1.15	1.08	1.05
1972	1.22	1.19	1.20	1.42	1.39	1.35	1.37	1.42	1.61	1.99	2.03	2.68	1.57	1.05
1973	2.15	2.17	2.18	2.39	2.59	2.76	2.68	2.41	2.45	2.57	2.91	3.37	2.55	1.05
1974	3.30	3.45	3.32	3.27	3.07	2.86	2.67	2.68	2.66	2.68	2.72	2.95	3.02	1.10
1975	2.76	2.62	2.33	2.37	2.44	2.48	2.50	2.46	2.61	2.74	2.82	2.64	2.54	1.10
1976	2.60	2.33	2.02	2.24	2.34	2.34	2.35	2.31	2.25	2.12	1.88	1.63	2.15	1.50
1977	1.60	1.67	1.88	1.97	2.00	2.03	2.15	2.24	2.29	2.28	2.16	2.01	2.02	2.00
1978	1.98	1.97	2.02	2.09	2.11	2.18	2.22	2.27	2.35	2.49	2.64	2.54	2.25	2.00
1979	2.51	2.41	2.27	2.38	2.45	2.39	2.40	2.36	2.42	2.49	2.73	2.92	2.48	2.10
1980	3.01	2.99	3.10	3.19	3.19	3.22	3.25	3.24	3.24	3.17	3.14	2.87	3.12	2.25
1981	2.55	2.45	2.34	2.39	2.54	2.44	2.46	2.55	2.60	2.57	2.50	2.30	2.47	2.40
1982	2.15	1.98	2.13	2.26	2.36	2.56	2.71	2.95	3.03	3.04	3.13	3.35	2.55	2.55
1983	3.32	3.15	3.17	3.15	3.15	3.11	3.21	3.32	3.34	3.36	3.30	3.12	3.21	2.65
1984	2.90	2.65	2.55	2.56	2.64	2.62	2.67	2.70	2.68	2.64	2.60	2.44	2.63	2.55
1985	2.29	2.11	2.21	2.29	2.33	2.32	2.29	2.30	2.39	2.32	2.00	1.73	2.23	2.55
1986	1.45	1.40	1.47	1.50	1.47	1.42	1.47	1.52	1.66	1.69	1.60	1.47	1.45	1.92
1987	1.49	1.56	1.62	1.72	1.77*									1.82
Sorghum														
Dollars per cwt														
1970	2.07	2.02	2.02	2.04	2.10	2.16	2.17	2.19	2.33	2.43	2.37	2.27	2.04	1.61
1971	2.01	1.76	1.78	1.86	1.89	1.86	1.87	1.87	1.88	1.90	1.98	2.05	1.86	1.73
1972	2.11	2.09	2.19	2.72	2.72	2.60	2.60	2.56	2.66	3.10	3.46	3.64	2.45	1.79
1973	3.87	3.65	3.66	3.83	4.03	4.38	4.25	3.78	3.59	3.59	4.15	5.07	3.82	1.79
1974	5.30	5.78	5.85	5.33	4.96	4.21	4.03	4.15	4.21	4.15	4.25	4.69	4.95	1.88
1975	4.56	4.43	4.05	4.00	4.06	4.09	4.14	4.14	4.14	4.29	4.53	4.03	4.23	1.88
1976	4.20	3.68	3.30	3.51	3.59	3.51	3.55	3.44	3.20	3.12	2.84	2.63	3.62	2.55
1977	2.52	2.80	3.03	3.05	3.15	3.20	3.39	3.62	3.66	3.64	3.50	3.37	3.25	3.39
1978	3.22	3.35	3.45	3.58	3.54	3.55	3.54	3.58	3.66	4.30	4.46	4.27	3.59	3.39
1979	4.24	3.90	3.99	3.90	4.05	3.98	4.05	3.96	4.04	4.49	4.95	5.12	4.19	3.57
1980	5.12	5.36	5.48	5.49	5.48	5.33	5.17	5.25	5.16	5.03	4.84	4.55	5.19	3.82
1981	4.07	3.90	3.87	3.95	4.09	4.08	4.00	4.10	4.35	4.17	3.96	3.95	4.01	4.07
1982	3.80	3.70	3.78	3.97	4.09	4.42	4.67	4.92	5.05	5.05	5.03	5.29	4.41	4.32
1983	5.26	5.01	4.98	4.93	4.92	4.74	4.85	5.00	5.08	4.94	4.64	4.58	4.89	4.50
1984	4.24	4.05	4.05	4.15	4.16	4.10	4.24	4.46	4.54	4.52	4.04	3.74	4.15	4.32
1985	3.27	3.30	3.47	3.76	3.69	3.55	3.67	3.80	3.99	3.43	3.06	2.66	3.45	4.32
1986	2.36	2.34	2.38	2.41	2.37	2.36	2.45	2.58	2.69	2.79	2.66	2.52	2.39	3.25
1987	2.43	2.48	2.69	2.73	2.75*									3.11
Oats														
Dollars per bushel														
1970	.61	.58	.57	.61	.61	.63	.65	.67	.68	.66	.63	.66	.62	.63
1971	.72	.63	.56	.57	.58	.60	.62	.64	.64	.64	.64	.64	.60	.54
1972	.67	.66	.62	.64	.67	.70	.81	.81	.78	.77	.77	.80	.72	.54
1973	.90	.86	1.13	1.09	1.14	1.13	1.20	1.32	1.44	1.40	1.24	1.27	1.18	.54
1974	1.30	1.37	1.55	1.57	1.68	1.70	1.70	1.62	1.58	1.46	1.51	1.54	1.53	.54
1975	1.49	1.45	1.44	1.45	1.41	1.40	1.42	1.44	1.46	1.46	1.44	1.47	1.46	.54
1976	1.64	1.64	1.48	1.49	1.46	1.45	1.51	1.58	1.63	1.64	1.64	1.52	1.56	.72
1977	1.29	1.02	.93	.94	1.04	1.10	1.13	1.18	1.22	1.17	1.19	1.24	1.09	1.03
1978	1.16	1.08	1.06	1.06	1.08	1.15	1.19	1.22	1.25	1.27	1.29	1.29	1.20	1.03
1979	1.35	1.33	1.24	1.29	1.31	1.41	1.31	1.39	1.37	1.34	1.38	1.43	1.33	1.08
1980	1.40	1.50	1.53	1.63	1.65	1.84	1.92	1.98	2.01	2.08	2.05	2.05	1.72	1.16
1981	1.99	1.84	1.72	1.74	1.78	1.88	1.94	1.97	1.99	2.02	1.99	1.99	1.88	1.24
1982	1.88	1.57	1.39	1.35	1.32	1.40	1.44	1.46	1.48	1.49	1.54	1.54	1.49	1.31
1983	1.51	1.46	1.45	1.55	1.62	1.67	1.73	1.81	1.88	1.81	1.82	1.84	1.62	1.36
1984	1.80	1.68	1.62	1.60	1.69	1.64	1.72	1.74	1.69	1.68	1.68	1.60	1.67	1.31
1985	1.59	1.31	1.16	1.10	1.08	1.17	1.20	1.18	1.16	1.14	1.13	1.21	1.23	1.31
1986	1.10	.90	.86	.99	1.11	1.32	1.44	1.46	1.47	1.45	1.50	1.57	1.23	.99
1987	1.52	1.29	1.40	1.49	1.61	1.62	1.76	1.76*						.99

Continued—



Table 8.--Average prices received by farmers, United States, by months, and loan rate, 1970-87 1/--continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average 2/	Loan rate
Dollars per bushel														
All barley														
1970	.94	.90	.85	.91	.93	.96	1.02	1.02	1.03	1.02	1.03	1.12	.97	.83
1971	1.15	1.07	.87	.92	.96	1.02	1.04	1.04	1.01	.98	.99	1.04	.99	.86
1972	1.09	1.04	.96	1.07	1.17	1.21	1.32	1.42	1.34	1.31	1.31	1.39	1.21	.86
1973	1.55	1.58	2.10	2.16	2.23	2.10	2.19	2.32	2.52	2.61	2.15	2.19	2.14	.86
1974	2.25	2.35	2.78	2.86	3.11	3.41	3.30	3.17	2.89	2.55	2.72	2.75	2.81	.90
1975	2.30	2.35	2.56	2.69	2.68	2.43	2.35	2.31	2.31	2.34	2.31	2.41	2.42	.90
1976	2.60	2.51	2.35	2.33	2.22	2.11	2.08	2.19	2.19	2.25	2.22	2.12	2.25	1.22
1977	1.93	1.53	1.53	1.69	1.63	1.82	1.79	1.90	1.98	1.90	1.93	2.15	1.78	1.63
1978	2.04	1.83	1.86	1.85	1.90	1.93	1.90	1.95	1.87	1.89	1.96	2.07	1.92	1.63
1979	2.30	2.22	2.23	2.33	2.32	2.40	2.32	2.27	2.23	2.18	2.15	2.21	2.27	1.71
1980	2.36	2.52	2.59	2.65	2.81	2.90	2.97	3.09	3.05	3.04	3.04	3.00	2.79	1.83
1981	2.94	2.41	2.37	2.44	2.38	2.49	2.48	2.50	2.40	2.40	2.42	2.53	2.48	1.95
1982	2.39	2.16	2.20	2.17	1.98	2.06	2.19	2.16	2.00	2.09	2.22	2.36	2.18	2.08
1983	2.32	2.20	2.34	2.46	2.53	2.55	2.55	2.55	2.47	2.50	2.54	2.78	2.47	2.16
1984	2.61	2.54	2.26	2.25	2.29	2.25	2.19	2.24	2.21	2.18	2.16	2.22	2.29	2.08
1985	2.14	2.08	1.98	1.88	1.96	2.05	2.07	2.05	1.95	1.88	1.85	1.73	1.98	2.08
1986	1.57	1.67	1.51	1.45	1.58	1.69	1.61	1.60	1.63	1.69	1.69	1.76	1.59	1.56
1987	1.74	1.84	2.00	1.87	1.74	1.89	1.83	1.74*						
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May		
Feed barley														
1979	2.38	2.22	2.21	2.29	2.20	2.18	2.23	2.14	2.24	2.16	2.09	2.21		
1980	2.38	2.43	2.46	2.56	2.70	2.75	2.96	3.09	2.98	2.99	2.90	3.01		
1981	2.98	2.36	2.23	2.32	2.30	2.29	2.29	2.41	2.28	2.29	2.35	2.58		
1982	2.52	2.23	1.98	1.91	1.87	1.94	1.98	2.07	1.99	2.08	2.26	2.43		
1983	2.52	2.31	2.23	2.41	2.45	2.51	2.52	2.58	2.47	2.54	2.55	2.86		
1984	2.72	2.60	2.10	2.13	2.19	2.19	2.20	2.22	2.27	2.19	2.16	2.30		
1985	2.26	2.05	1.75	1.74	1.85	1.90	2.03	2.00	1.90	1.83	1.85	1.81		
1986	1.61	1.44	1.21	1.33	1.49	1.62	1.59	1.56	1.61	1.69	1.71	1.84		
1987	1.79	1.67	1.54	1.57	1.66	1.68	1.63	1.68*						
Malting barley														
1979	2.18	2.22	2.24	2.40	2.44	2.53	2.39	2.30	2.23	2.20	2.19	2.21		
1980	2.34	2.61	2.72	2.81	2.97	3.04	2.99	3.08	3.11	3.10	3.14	2.99		
1981	2.86	2.48	2.58	2.66	2.49	2.68	2.63	2.70	2.55	2.50	2.48	2.42		
1982	2.26	2.10	2.38	2.58	2.22	2.26	2.39	2.32	2.00	2.09	2.13	2.18		
1983	2.05	2.06	2.50	2.69	2.72	2.61	2.61	2.50	2.47	2.46	2.54	2.53		
1984	2.52	2.48	2.50	2.52	2.52	2.39	2.18	2.29	2.11	2.17	2.17	2.10		
1985	2.02	2.13	2.49	2.33	2.24	2.32	2.19	2.13	1.99	1.93	1.85	1.66		
1986	1.52	2.07	2.23	1.85	1.83	1.78	1.65	1.70	1.69	1.69	1.65	1.66		
1987	1.68	2.04	2.55	2.39	1.90	2.08	2.01	1.82*						

1/ Prices do not include an allowance for loans outstanding and government purchases. 2/ U.S. season average prices based on monthly prices weighted by monthly marketings. *Preliminary.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Table 9.—Cash prices at principal markets, 1971-87

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Dollars per bushel													
Corn, no. 2 yellow; Gulf Ports, export prices													
1971	1.26	1.17	1.24	1.32	1.30	1.31	1.33	1.36	1.38	1.34	1.37	1.41	1.32
1972	1.50	1.45	1.50	1.70	2.01	2.06	2.03	1.95	2.20	2.58	2.78	3.11	2.07
1973	2.72	2.70	2.74	2.87	3.11	3.33	3.21	2.90	2.89	2.96	3.36	3.70	3.04
1974	3.59	3.86	3.68	3.69	3.34	3.06	3.05	3.03	2.90	3.02	3.03	3.29	3.30
1975	3.11	2.98	2.80	2.77	2.80	2.88	2.87	2.82	3.00	3.09	3.00	2.95	2.93
1976	2.92	2.70	2.51	2.63	2.83	2.81	2.73	2.68	2.56	2.40	2.16	1.95	2.57
1977	1.99	2.11	2.37	2.44	2.42	2.57	2.64	2.83	2.86	2.70	2.45	2.34	2.48
1978	2.31	2.44	2.54	2.49	2.66	2.72	2.77	2.83	2.85	3.05	3.33	3.02	2.75
1979	3.00	3.03	2.96	2.94	2.68	2.89	2.80	2.74	2.81	2.89	3.33	3.64	2.98
1980	3.58	3.57	3.72	3.73	3.78	3.64	3.61	3.69	3.58	3.46	3.51	3.23	3.59
1981	2.93	2.84	2.83	2.74	2.92	2.87	2.92	3.00	3.00	2.94	2.82	2.58	2.87
1982	2.55	2.33	2.62	2.68	2.74	2.98	3.18	3.39	3.40	3.43	3.57	3.88	3.06
1983	3.75	3.76	3.74	3.64	3.60	3.48	3.74	3.76	3.71	3.73	3.62	3.52	3.67
1984	3.31	3.08	2.98	2.90	3.03	3.04	3.05	3.05	2.96	2.95	2.92	2.67	3.00
1985	2.59	2.50	2.69	2.75	2.72	2.63	2.56	2.57	2.68	2.63	2.12	1.85	2.52
1986	1.68	1.66	1.83	1.81	1.73	1.70	1.83	1.89	2.06	2.06	1.95	1.81	1.83
1987	1.86	2.00	2.08	2.11	2.20								
Corn, no. 2 yellow, St. Louis													
1971	1.06	1.01	1.07	1.17	1.16	1.17	1.17	1.21	1.24	1.22	1.25	1.26	1.17
1972	1.35	1.26	1.32	1.55	1.60	1.71	1.57	1.62	1.95	2.36	2.46	2.76	1.79
1973	2.29	2.28	2.40	2.63	2.84	3.03	2.91	2.64	2.63	2.82	3.29	3.52	2.77
1974	3.49	3.60	3.45	3.44	3.16	2.93	2.87	2.89	2.76	2.86	2.90	3.10	3.12
1975	2.90	2.62	2.53	2.56	2.60	2.66	2.69	2.66	2.81	2.90	2.91	2.78	2.72
1976	2.69	2.41	2.27	2.44	2.51	2.48	2.48	2.46	2.37	2.22	1.99	1.72	2.34
1977	1.66	1.75	2.14	2.23	2.30	2.24	2.38	2.46	2.49	2.45	2.27	2.12	2.21
1978	2.05	2.13	2.25	2.30	2.33	2.41	2.47	2.53	2.60	2.77	2.95	2.73	2.46
1979	2.68	2.59	2.51	2.66	2.50	2.64	2.54	2.53	2.60	2.66	3.01	3.31	2.68
1980	3.26	3.35	3.53	3.59	3.60	3.47	3.42	3.49	3.42	3.33	3.34	3.03	3.40
1981	2.61	2.53	2.59	2.54	2.65	2.61	2.66	2.78	2.78	2.75	2.68	2.42	2.63
1982	2.32	2.12	2.43	2.49	2.52	2.79	2.99	3.24	3.24	3.27	3.39	3.68	2.87
1983	3.60	3.50	3.53	3.45	3.41	3.31	3.55	3.61	3.58	3.57	3.43	3.33	3.49
1984	3.09	2.84	2.77	2.75	2.86	2.84	2.86	2.88	2.81	2.79	2.72	2.47	2.81
1985	2.38	2.27	2.50	2.59	2.55	2.50	2.42	2.46	2.56	2.52	2.01	1.67	2.37
1986	1.47	1.46	1.68	1.69	1.61	1.57	1.65	1.74	1.93	1.92	1.79	1.65	1.68
1987	1.65	1.78	1.91	1.97	2.05								
Corn, no. 2 yellow, Omaha													
1971	1.15	1.14	1.15	1.24	1.25	1.23	1.23	1.25	1.27	1.23	1.24	1.21	1.22
1972	1.28	1.28	1.34	1.49	1.50	1.55	1.49	1.51	1.84	2.25	2.32	2.71	1.71
1973	2.37	2.34	2.40	2.49	2.71	2.95	2.76	2.49	2.51	2.68	3.19	3.55	2.70
1974	3.46	3.63	3.46	3.36	3.07	2.79	2.75	2.85	2.81	2.84	2.92	3.12	3.09
1975	2.95	2.75	2.55	2.56	2.57	2.60	2.62	2.59	2.74	2.86	2.83	2.69	2.69
1976	2.59	2.36	2.17	2.30	2.38	2.38	2.35	2.29	2.21	2.10	1.90	1.66	2.22
1977	1.67	1.79	2.02	2.04	2.02	2.03	2.14	2.25	2.34	2.33	2.13	1.98	2.06
1978	1.95	2.05	2.04	2.09	2.12	2.13	2.17	2.26	2.40	2.59	2.68	2.45	2.24
1979	2.37	2.37	2.32	2.36	2.26	2.33	2.23	2.32	2.43	2.50	2.81	2.98	2.44
1980	3.01	3.16	3.34	3.30	3.29	3.18	3.17	3.24	3.24	3.19	3.15	2.79	3.17
1981	2.51	2.44	2.39	2.37	2.47	2.45	2.48	2.61	2.65	2.65	2.54	2.23	2.48
1982	2.23	2.12	2.35	2.37	2.42	2.62	2.82	3.09	3.10	3.11	3.18	3.39	2.73
1983	3.32	3.23	3.24	3.17	3.11	3.03	3.25	3.33	3.35	3.37	3.22	3.11	3.23
1984	2.94	2.71	2.61	2.55	2.60	2.61	2.68	2.73	2.68	2.70	2.61	2.39	2.65
1985	2.35	2.26	2.28	2.36	2.33	2.31	2.31	2.34	2.43	2.42	2.01	1.61	2.25
1986	1.41	1.40	1.55	1.54	1.44	1.39	1.47	1.57	1.76	1.77	1.59	1.47	1.53
1987	1.51	1.57	1.68	1.75	1.79								

Table 9.—Cash prices at principal markets, 1971-87—continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Dollars per bushel													
Corn, no. 2 yellow, Chicago													
1971	1.16	1.10	1.07	1.22	1.21	1.21	1.22	1.26	1.28	1.25	1.29	1.29	1.21
1972	1.40	1.32	1.33	1.57	1.58	1.59	1.59	1.65	2.01	2.42	2.52	2.91	1.82
1973	2.47	2.37	2.50	2.68	2.90	3.13	2.99	2.69	2.70	2.93	3.35	3.63	2.94
1974	3.55	3.74	3.48	3.47	3.19	2.96	2.90	2.96	2.82	2.89	2.95	3.12	3.17
1975	2.99	2.74	2.58	2.59	2.62	2.70	2.68	2.68	2.84	2.96	2.96	2.84	2.77
1976	2.77	2.49	2.33	2.44	2.53	2.54	2.52	2.50	2.41	2.27	2.05	1.78	2.38
1977	1.80	1.84	2.14	2.19	2.19	2.21	2.36	2.51	2.57	2.51	2.28	2.17	2.23
1978	2.13	2.22	2.28	2.27	2.29	2.35	2.42	2.53	2.66	2.83	3.00	2.83	2.49
1979	2.78	2.73	2.59	2.69	2.54	2.65	2.60	2.61	2.70	2.70	3.08	3.36	2.75
1980	3.44	3.43	3.43	3.54	3.56	3.49	3.48	3.53	3.47	3.41	3.41	3.09	3.44
1981	2.72	2.61	2.60	2.52	2.63	2.63	2.67	2.69	2.73	2.72	2.61	2.36	2.63
1982	2.17	2.07	2.38	2.44	2.54	2.74	2.98	3.12	3.11	3.28	3.33	3.60	2.98
1983	3.52	3.47	3.51	3.38	3.30	3.29	3.52	3.61	3.61	3.62	3.45	3.23	3.46
1984	2.95	2.81	2.79	2.72	2.79	2.79	2.84	2.90	2.85	2.83	2.76	2.50	2.79
1985	2.31	2.26	2.46	2.50	2.51	2.49	2.45	2.46	2.55	2.52	1.98	1.68	2.35
1986	1.49	1.51	1.68	1.66	1.57	1.50	1.60	1.69	1.89	1.88	1.68	1.53	1.64
1987	1.62	1.73	1.86	1.89	1.95								
Dollars per cwt													
Grain sorghum, no. 2 yellow; Gulf Ports, export prices													
1971	2.19	2.18	2.29	2.43	2.41	2.42	2.43	2.44	2.34	2.26	2.36	2.47	2.35
1972	2.64	2.58	2.76	3.32	3.69	3.56	3.46	3.38	3.56	3.96	4.52	5.14	3.55
1973	4.78	4.96	4.84	4.96	5.25	5.50	5.15	4.68	4.35	4.25	5.26	5.80	4.98
1974	5.84	6.77	6.63	6.35	5.39	4.95	5.04	5.06	5.02	4.80	4.69	5.55	5.51
1975	5.36	5.24	4.94	4.91	4.92	4.99	5.01	4.89	4.89	4.97	5.13	4.60	4.99
1976	4.80	4.45	4.24	4.37	4.52	4.52	4.43	4.25	4.16	3.82	3.64	3.43	4.22
1977	3.49	3.68	4.08	4.08	4.00	4.08	4.34	4.59	4.62	4.40	4.11	3.98	4.12
1978	3.95	4.26	4.38	4.34	4.40	4.44	4.46	4.46	4.56	4.56	5.40	5.05	4.55
1979	5.11	5.27	5.28	5.36	5.10	5.39	5.20	5.19	5.29	5.42	6.03	6.49	5.43
1980	6.43	6.48	6.79	6.71	6.65	6.46	6.40	6.38	6.34	5.76	5.60	5.29	6.27
1981	5.00	4.91	5.10	5.08	5.27	5.14	5.11	5.21	5.30	5.01	4.66	4.54	5.03
1982	4.36	4.44	5.00	5.06	5.20	5.49	5.64	5.98	6.05	5.78	5.68	6.18	5.41
1983	6.15	5.99	6.01	5.94	5.87	5.70	5.93	5.88	5.98	5.84	5.05	4.86	5.77
1984	4.75	4.60	4.84	5.04	5.19	5.10	5.32	5.36	5.23	4.78	4.49	4.04	4.90
1985	3.70	3.97	4.34	4.52	4.45	4.30	4.28	4.50	4.80	3.90	3.37	2.71	4.07
1986	2.95	3.15	3.26	3.16	3.03	3.04	3.34	3.28	3.51	3.47	3.30	3.04	3.21
1987	3.13	3.35	3.56	3.49	3.64								
Sorghum, no. 2 yellow, Kansas City													
1971	1.91	1.80	1.91	2.06	2.06	2.07	2.07	2.09	2.08	2.06	2.11	2.05	2.02
1972	2.21	2.17	2.42	2.88	3.06	2.88	2.86	2.83	3.09	3.61	3.93	4.72	3.06
1973	4.37	4.37	4.31	4.37	4.71	4.99	4.64	4.03	3.84	3.99	5.02	5.79	4.53
1974	5.64	6.32	6.10	5.70	4.95	4.55	4.48	4.64	4.60	4.53	4.82	5.13	5.12
1975	4.66	4.53	4.36	4.33	4.36	4.47	4.62	4.47	4.47	4.66	4.73	4.29	4.50
1976	4.27	3.88	3.60	3.77	3.91	3.85	3.75	3.62	3.53	3.28	3.15	2.73	3.61
1977	2.78	3.05	3.40	3.36	3.37	3.49	3.78	3.92	3.92	3.82	3.54	3.41	3.49
1978	3.43	3.61	3.67	3.64	3.71	3.73	3.77	3.81	3.92	4.41	4.89	4.44	3.92
1979	4.34	4.42	4.41	4.57	4.21	4.35	4.20	4.15	4.31	4.49	5.36	5.71	4.54
1980	5.61	5.65	5.91	5.82	5.79	5.52	5.46	5.49	5.38	5.23	5.29	4.58	5.48
1981	4.16	4.14	4.14	4.27	4.44	4.26	4.28	4.45	4.48	4.50	4.38	4.02	4.29
1982	4.06	3.85	4.25	4.37	4.37	4.54	5.08	5.30	5.37	5.37	5.32	5.69	4.80
1983	5.55	5.37	5.25	5.16	5.09	5.03	5.40	5.36	5.39	5.40	4.95	4.74	5.22
1984	4.46	4.25	4.28	4.32	4.48	4.33	4.58	4.76	4.74	4.74	4.50	4.06	4.46
1985	3.56	3.62	3.75	3.97	3.95	3.80	3.82	4.00	4.25	4.00	3.20	2.71	3.72
1986	2.47	2.60	2.70	2.62	2.50	2.57	2.80	2.85	3.10	3.20	2.80	2.55	2.73
1987	2.64	2.75	2.90	2.95	3.05								

Continued—

Table 9.—Cash prices at principal markets, 1971-87—continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Dollars per cwt													
Sorghum, no. 2 yellow, Texas High Plains													
1971	N.Q.	1.99	1.99	2.08	2.12	2.08	2.08	2.11	2.13	2.14	2.18	2.21	2.10
1972	2.28	2.26	2.48	2.98	3.03	2.98	3.01	2.96	3.20	3.69	3.77	5.21	3.15
1973	4.50	4.44	4.40	4.43	4.75	5.22	4.89	4.42	4.22	4.08	4.91	5.80	4.67
1974	5.74	6.26	6.12	5.82	5.00	4.52	4.41	4.70	4.64	4.63	4.67	5.23	5.14
1975	5.03	4.56	4.32	4.32	4.29	4.38	4.47	4.48	4.49	4.63	5.01	4.40	4.53
1976	4.33	3.97	3.73	3.79	3.86	3.86	3.86	3.77	3.67	3.50	3.46	3.10	3.74
1977	3.13	3.38	3.58	3.63	3.62	3.67	4.04	4.28	4.25	4.27	4.12	3.93	3.82
1978	3.85	4.06	4.13	4.08	4.04	4.05	4.01	4.06	4.21	4.83	5.39	4.97	4.31
1979	4.92	4.83	4.76	4.75	4.49	4.56	4.46	4.48	4.78	4.99	5.71	5.89	4.88
1980	5.95	6.27	6.62	6.42	6.26	5.93	5.79	5.88	5.90	5.83	5.80	5.02	5.97
1981	4.65	4.70	4.71	4.63	4.77	4.78	4.75	4.91	5.26	5.28	5.24	4.80	4.87
1982	4.39	4.08	4.38	4.65	4.82	5.19	5.52	5.94	5.76	5.81	5.86	5.85	5.19
1983	5.77	5.56	5.49	5.43	5.35	5.14	5.33	5.68	5.67	5.77	5.72	5.46	5.53
1984	5.22	4.95	4.86	4.90	4.84	4.86	4.98	5.14	5.22	5.25	5.24	N.Q.	5.04
1985	4.19	4.38	4.30	4.49	4.47	4.36	4.33	4.48	4.77	4.84	3.93	3.36	4.32
1986	3.35	3.24	2.97	3.06	2.94	2.89	3.06	3.32	3.56	3.60	3.58	3.30	3.24
1987	3.19	3.27	3.27	3.39	3.40								
Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Average
Dollars per bushel													
Barley, no. 3 or better malting, 65% or better plump, Minneapolis,													
1971	1.30	1.25	1.10	1.11	1.17	1.17	1.17	1.20	1.19	1.19	1.19	1.20	1.19
1972	1.22	1.22	1.21	1.26	1.34	1.34	1.45	1.59	1.58	1.61	1.64	1.66	1.43
1973	1.74	1.82	2.45	2.64	2.64	2.62	2.64	2.76	3.27	3.57	2.98	2.94	2.67
1974	3.11	3.38	3.77	4.00	4.42	4.78	4.65	4.62	4.45	4.15	4.34	4.28	4.16
1975	3.97	3.83	3.65	3.93	3.83	3.56	3.35	3.24	3.21	3.22	3.17	3.22	3.52
1976	3.55	3.59	3.37	3.24	3.21	3.00	2.95	3.00	2.91	2.98	2.91	2.83	3.13
1977	2.38	2.02	1.92	2.15	2.25	2.36	2.32	2.26	2.33	2.32	2.44	2.51	2.27
1978	2.39	2.13	2.19	2.27	2.26	2.47	2.40	2.30	2.33	2.46	2.59	2.73	2.38
1979	2.80	2.82	2.67	3.10	3.18	3.06	2.93	2.87	2.81	2.69	2.73	2.82	2.87
1980	2.99	3.36	3.27	3.63	3.80	3.88	3.77	3.75	3.83	3.71	3.84	3.80	3.64
1981	3.34	2.95	3.15	3.05	3.02	3.07	2.92	3.00	3.14	2.99	2.98	3.05	3.06
1982	2.93	2.63	2.48	2.37	2.42	2.45	2.37	2.38	2.42	2.45	2.68	2.76	2.53
1983	2.60	2.54	2.76	2.90	2.96	2.95	2.77	2.85	2.76	2.91	3.04	3.06	2.84
1984	3.04	2.86	2.48	2.44	2.43	2.43	2.36	2.46	2.47	2.51	2.52	2.55	2.55
1985	2.46	2.25	2.03	2.15	2.10	2.27	2.29	2.28	2.20	2.34	2.40	2.07	2.24
1986	1.84	1.75	1.61	1.76	1.93	2.02	1.88	1.81	1.92	2.01	2.05	2.12	1.89
1987	2.07	1.93	1.73	1.98	2.08	2.05	2.01	2.02					
Barley, no. 2 feed, Minneapolis 1/ 2/													
1971	1.08	1.00	.95	.99	1.04	1.04	1.04	1.07	1.07	1.05	1.06	1.08	1.04
1972	1.05	.96	.98	1.11	1.16	1.14	1.27	1.34	1.20	1.19	1.25	1.36	1.17
1973	1.51	1.67	2.12	2.12	2.02	1.80	2.12	2.34	2.51	2.32	1.74	2.10	2.03
1974	2.36	2.36	2.69	2.48	3.07	3.17	2.89	2.82	2.59	2.26	2.24	2.05	2.50
1975	1.67	2.04	2.77	3.00	2.83	2.42	2.23	2.11	2.26	2.30	2.39	2.50	2.38
1976	2.62	2.45	2.48	2.68	2.46	2.21	2.05	2.20	2.35	2.29	2.28	2.13	2.35
1977	1.76	1.63	1.50	1.58	1.66	1.65	1.65	1.65	1.65	1.66	1.91	1.90	1.60
1978	1.84	1.71	1.68	1.77	1.81	1.88	1.79	1.71	1.69	1.86	1.89	1.96	1.80
1979	2.16	2.39	2.15	2.22	2.34	2.11	2.15	2.09	2.04	2.06	2.12	2.09	2.16
1980	2.15	2.48	2.39	2.43	2.77	3.03	2.75	2.81	2.90	2.63	2.51	2.39	2.70
1981	2.09	2.26	2.35	2.21	2.26	2.31	2.06	2.20	2.27	2.16	2.16	2.24	2.21
1982	2.12	1.85	1.72	1.69	1.54	1.58	1.59	1.63	1.72	1.73	2.01	1.95	1.76
1983	1.96	1.95	2.42	2.61	2.60	2.53	2.39	2.55	2.56	2.65	2.74	2.77	2.48
1984	2.59	2.18	2.13	2.05	2.10	2.06	1.88	1.98	1.99	1.97	2.05	2.05	2.09
1985	1.90	1.66	1.46	1.40	1.41	1.49	1.60	1.57	---	---	---	1.31	1.53
1986	1.23	1.16	1.13	1.27	1.50	1.63	1.23	---	---	1.64	1.76	1.86	1.44
1987	1.73	1.59	1.60	1.76	1.78	1.82	1.74	1.72					

Continued--

Table 9.—Cash prices at principal markets, 1971-87--continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average
Dollars per bushel													
Barley, no. 2 Western, Portland													
1971	1.30	1.12	.99	1.04	1.06	1.17	1.20	1.20	1.23	1.24	1.22	1.22	1.17
1972	1.16	1.22	1.34	1.41	1.52	1.50	1.66	1.91	1.83	1.79	1.73	1.84	1.58
1973	2.01	2.31	2.58	2.61	2.63	2.70	2.63	2.85	2.93	2.93	2.36	2.39	2.58
1974	2.51	2.79	3.14	3.23	3.41	3.68	3.56	3.18	2.82	2.47	2.75	2.68	3.02
1975	2.47	2.04	2.77	3.01	2.82	2.46	2.38	2.45	2.56	2.56	2.44	2.50	2.54
1976	2.65	2.70	2.55	2.61	2.49	2.28	2.28	2.50	2.63	2.34	2.36	2.41	2.48
1977	2.19	2.10	1.96	2.00	1.97	2.04	2.13	2.19	2.20	2.24	2.39	2.41	2.15
1978	2.41	2.24	2.22	2.02	1.94	1.97	2.05	2.08	1.98	2.04	2.09	2.14	2.10
1979	2.47	2.89	2.76	2.75	2.69	2.57	2.67	2.68	2.79	2.67	2.63	2.71	2.69
1980	2.78	3.03	2.88	2.93	3.34	3.56	3.63	3.68	3.71	3.58	3.48	3.50	3.34
1981	3.21	2.83	2.76	2.73	2.67	2.73	2.73	2.97	2.94	2.91	2.99	3.01	2.87
1982	2.82	2.54	2.56	2.46	2.22	2.49	2.40	2.45	2.44	2.49	2.61	2.73	2.52
1983	2.60	2.48	2.70	2.91	2.98	3.02	3.00	3.13	2.90	2.91	3.13	3.17	2.91
1984	3.05	2.59	2.57	2.53	2.58	2.62	2.65	2.58	2.56	2.49	2.46	2.44	2.59
1985	2.37	2.26	2.13	2.06	2.17	2.31	2.47	2.37	2.16	2.15	2.17	2.16	2.22
1986	1.98	1.79	1.75	1.73	1.97	2.01	1.86	2.00	2.12	2.09	2.11	2.17	1.97
1987	2.04	1.96	2.04	2.04	2.11	2.13	2.16	2.15					
Oats, no. 2 Heavy White, Toledo													
1971	.85	.75	.71	.72	.76	.81	.83	.81	.82	.80	.77	.81	.79
1972	.82	.82	.86	.88	.89	.88	1.09	1.00	1.01	.92	.98	1.02	.93
1973	1.01	1.04	1.23	1.27	1.31	1.32	1.49	1.63	1.75	1.67	1.48	1.46	1.39
1974	1.50	1.59	1.74	1.72	1.85	1.88	1.88	1.75	1.72	1.60	1.67	1.64	1.71
1975	1.61	1.52	1.47	1.41	1.35	1.48	1.49	1.53	1.58	1.56	1.52	1.54	1.50
1976	1.73	1.58	1.51	1.54	1.57	1.65	1.77	1.83	1.91	1.85	1.80	1.81	1.71
1977	1.61	1.33	1.19	1.15	1.17	1.40	1.53	1.53	1.50	1.43	1.47	1.51	1.40
1978	1.49	1.29	1.27	1.24	1.29	1.39	1.39	1.42	1.44	1.39	1.38	1.45	1.37
1979	1.59	1.60	1.47	1.44	1.45	1.56	1.64	1.64	1.64	1.65	1.70	1.80	1.60
1980	1.89	1.79	1.78	1.85	2.00	2.22	2.39	2.51	2.49	2.39	2.36	2.39	2.17
1981	2.40	2.03	1.98	1.97	2.14	2.31	2.25	2.32	2.37	2.35	2.31	2.33	2.23
1982	2.17	1.61	1.39	1.34	1.37	1.49	1.58	1.58	1.54	1.52	1.52	1.53	1.55
1983	1.56	1.54	1.77	1.98	2.12	2.21	2.24	2.25	2.07	2.12	2.16	2.08	2.01
1984	2.06	2.06	2.00	1.95	1.92	1.96	1.94	1.96	1.96	1.88	1.75	1.60	1.92
1985	1.54	1.33	1.04	.96	.91	1.01	1.09	1.08	1.10	1.08	.95	.92	1.08
1986	.81	.82	.83	.81	.93	1.23	1.43	1.52	1.55	1.34	1.44	1.69	1.20
1987	1.56	1.24	1.55	1.62	1.62	1.77	1.83	1.83					
Oats, no. 2 Heavy White, Minneapolis													
1971	.70	.63	.61	.64	.64	.66	.68	.69	.69	.66	.67	.70	.66
1972	.70	.69	.70	.71	.76	.81	.91	.88	.84	.84	.86	.91	.80
1973	.93	.93	1.28	1.32	1.26	1.25	1.32	1.55	1.66	1.52	1.26	1.35	1.30
1974	1.43	1.63	1.68	1.71	1.87	1.80	1.74	1.64	1.64	1.49	1.72	1.78	1.68
1975	1.59	1.59	1.70	1.68	1.64	1.69	1.65	1.67	1.66	1.64	1.67	1.72	1.66
1976	1.93	1.84	1.67	1.67	1.66	1.62	1.67	1.78	1.80	1.76	1.81	1.68	1.74
1977	1.38	1.15	1.02	1.11	1.17	1.34	1.32	1.32	1.32	1.33	1.40	1.43	1.27
1978	1.36	1.24	1.28	1.36	1.39	1.47	1.40	1.47	1.54	1.60	1.48	1.55	1.43
1979	1.68	1.60	1.47	1.55	1.65	1.67	1.59	1.52	1.50	1.48	1.52	1.62	1.57
1980	1.67	1.80	1.70	1.86	1.96	2.15	2.16	2.20	2.25	2.23	2.21	2.23	2.04
1981	2.18	2.02	1.99	2.02	2.09	2.28	2.10	2.23	2.26	2.16	2.21	2.16	2.14
1982	2.12	1.87	1.53	1.51	1.51	1.67	1.67	1.67	1.63	1.63	1.73	1.71	1.69
1983	1.67	1.60	1.79	1.94	2.00	1.97	1.94	1.98	1.82	1.88	1.89	1.96	1.87
1984	1.92	1.84	1.77	1.79	1.84	1.92	1.87	1.81	1.82	1.79	1.73	1.65	1.81
1985	1.59	1.44	1.23	1.24	1.19	1.32	1.39	1.37	1.30	1.27	1.16	1.22	1.31
1986	1.18	1.05	1.12	1.29	1.39	1.72	1.66	1.64	1.56	1.46	1.59	1.83	1.46
1987	1.64	1.61	1.77	1.85	1.97	2.05	2.02	2.10					

N.Q.=No quotes. 1/ Prior to June 1977 reported as barley, no. 3 or better. 2/ Reporting point changed from Minneapolis #2 feed to Duluth #2 feed beginning March 1987.

Source: Grain and Feed Market News, AMS, USDA.

Table 10.--Feed-price ratios for livestock, poultry, and milk, by months, 1971-87

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
<u>HOG/CORN, U.S. basis 1/</u>													
1971	16.1	19.5	19.3	18.2	20.9	23.5	21.2	19.9	21.7	22.7	24.1	24.3	21.0
1972	23.0	23.0	22.3	20.8	22.3	25.4	27.9	24.7	21.9	18.7	20.3	21.0	22.6
1973	20.4	18.8	18.6	16.0	15.5	14.2	13.1	12.7	10.7	9.4	11.8	10.7	14.3
1974	10.2	10.8	11.1	11.7	12.4	13.5	14.5	14.7	17.0	17.7	19.8	19.0	14.4
1975	21.2	22.3	21.1	20.1	19.5	19.4	18.2	19.1	18.2	18.0	16.9	16.1	19.2
1976	15.3	14.1	15.4	16.3	16.3	16.8	15.8	15.6	18.1	19.8	23.8	26.3	17.8
1977	25.2	23.9	20.1	21.3	22.0	23.3	21.6	20.1	20.9	20.9	21.0	23.6	22.0
1978	24.2	25.8	23.4	23.0	24.0	24.1	21.8	19.4	18.4	15.9	14.4	14.3	20.7
1979	14.8	14.0	15.2	15.5	14.8	15.4	13.9	11.9	11.8	13.3	15.1	15.8	14.3
1980	15.3	15.8	14.7	13.7	12.8	12.8	11.9	12.0	12.6	15.0	15.7	17.1	14.1
1981	19.1	18.4	17.7	16.3	17.1	19.8	19.8	20.1	21.8	22.4	23.1	26.6	20.2
1982	28.5	28.2	24.6	23.7	23.4	21.9	18.6	15.9	15.1	14.4	13.9	13.9	20.2
1983	13.3	12.8	11.8	14.0	15.4	14.6	14.3	14.3	14.1	14.6	15.8	16.2	14.3
1984	16.0	16.5	18.4	19.0	18.2	18.4	16.3	15.3	15.4	16.9	17.6	17.4	17.1
1985	17.3	20.4	19.5	19.8	19.0	18.4	17.6	17.3	19.2	22.7	29.5	35.9	21.4
1986	40.2	37.9	35.9	33.7	32.1	33.9	32.2	33.4	31.9	34.7	37.3	39.9	35.3
1987 <u>2/</u>	36.4	31.3	25.1	23.4	24.1								
<u>BEEF-STEER/CORN, Omaha 3/</u>													
1971	28.3	28.3	29.0	27.6	28.5	29.5	28.6	27.6	28.1	30.8	31.0	29.5	28.9
1972	27.1	27.3	25.1	24.7	27.1	28.1	30.6	29.8	24.9	20.8	20.5	19.5	25.5
1973	19.0	17.9	16.7	15.8	17.4	15.7	15.5	16.7	16.1	14.2	13.7	13.1	16.0
1974	12.0	10.9	10.9	11.1	11.8	12.5	13.1	15.0	17.6	18.2	17.2	15.0	13.8
1975	16.6	17.4	17.7	17.6	16.0	14.9	13.8	16.6	14.8	14.2	13.4	13.8	15.6
1976	14.3	16.1	18.0	17.4	16.1	16.0	15.9	17.5	19.0	19.2	21.5	24.2	17.9
1977	24.2	23.6	20.7	21.1	21.6	22.2	22.7	23.3	24.5	23.8	25.6	26.5	23.3
1978	27.8	26.8	26.4	26.6	28.5	30.5	32.7	33.2	30.8	26.5	25.0	25.6	28.4
1979	28.6	27.8	28.9	29.1	29.4	29.0	30.0	27.2	26.6	26.6	25.1	24.3	27.7
1980	23.1	21.3	19.5	19.5	19.1	19.3	19.4	20.0	20.6	21.4	21.5	23.8	20.7
1981	26.0	25.2	25.0	25.0	24.6	25.9	26.5	26.5	27.2	26.5	26.1	29.2	26.1
1982	27.5	27.7	25.1	25.2	24.5	23.4	22.7	21.9	21.8	21.2	19.6	18.1	23.2
1983	17.8	18.4	18.3	19.8	21.6	22.1	21.1	20.4	19.7	19.1	20.4	20.7	20.0
1984	21.3	22.4	24.6	25.6	24.8	24.1	22.2	21.5	21.5	21.0	20.4	21.7	22.6
1985	21.8	25.7	27.8	26.7	25.6	24.4	24.0	22.9	23.0	22.3	28.9	36.7	25.8
1986	42.1	42.7	39.7	38.8	40.8	43.9	41.9	42.2	40.2	38.9	41.4	43.9	41.4
1987	42.1	41.4	38.4	36.7	36.4								
<u>MILK/FEED, U.S. basis 4/</u>													
1971	1.76	1.84	1.88	1.85	1.81	1.81	1.78	1.72	1.69	1.66	1.68	1.72	1.77
1972	1.75	1.77	1.75	1.64	1.58	1.58	1.52	1.51	1.40	1.26	1.34	1.27	1.53
1973	1.51	1.57	1.62	1.57	1.51	1.51	1.49	1.50	1.45	1.37	1.30	1.16	1.46
1974	1.22	1.21	1.23	1.20	1.30	1.30	1.33	1.31	1.30	1.30	1.34	1.36	1.28
1975	1.48	1.56	1.66	1.70	1.49	1.44	1.43	1.39	1.35	1.28	1.30	1.34	1.45
1976	1.34	1.37	1.38	1.34	1.31	1.26	1.28	1.28	1.23	1.26	1.35	1.46	1.32
1977	1.56	1.62	1.58	1.51	1.50	1.52	1.51	1.47	1.49	1.43	1.45	1.54	1.52
1978	1.59	1.64	1.62	1.63	1.62	1.59	1.58	1.56	1.53	1.51	1.43	1.51	1.57
1979	1.54	1.55	1.59	1.54	1.54	1.56	1.56	1.55	1.53	1.50	1.48	1.42	1.53
1980	1.40	1.43	1.40	1.39	1.39	1.39	1.41	1.39	1.35	1.36	1.40	1.43	1.40
1981	1.48	1.53	1.56	1.54	1.55	1.53	1.53	1.51	1.46	1.47	1.47	1.50	1.51
1982	1.57	1.61	1.62	1.60	1.59	1.56	1.55	1.49	1.45	1.43	1.45	1.41	1.53
1983	1.36	1.39	1.36	1.34	1.33	1.33	1.34	1.32	1.32	1.32	1.35	1.40	1.35
1984	1.48	1.56	1.62	1.59	1.57	1.57	1.55	1.51	1.47	1.45	1.44	1.47	1.52
1985	1.51	1.56	1.55	1.53	1.52	1.50	1.48	1.48	1.46	1.45	1.51	1.55	1.51
1986	1.61	1.75	1.77	1.77	1.71	1.69	1.63	1.62	1.58	1.55	1.56	1.60	1.66
1987 <u>2/</u>	1.65	1.65	1.65	1.63	1.52								

Continued--

Table 10.--Feed-price ratios for livestock, poultry, and milk, by months, 1971-87--continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
EGG/FEED, U.S. basis ^{3/}													
1971	7.1	6.9	7.2	8.2	7.1	7.0	7.6	6.5	6.4	6.4	7.0	6.9	7.0
1972	7.7	6.9	8.0	8.7	9.0	7.3	7.7	7.9	6.9	6.4	7.1	8.3	7.7
1973	8.6	8.2	8.6	8.5	8.8	8.4	7.5	7.0	6.2	5.8	6.2	5.7	7.5
1974	6.7	6.5	6.6	7.2	7.2	7.2	7.6	6.5	6.5	6.3	6.4	6.8	6.8
1975	7.5	7.1	8.1	9.0	8.6	8.2	7.4	7.3	7.5	6.8	6.8	7.6	7.7
1976	7.7	7.8	8.7	9.1	8.5	8.1	7.3	6.8	5.9	5.8	6.7	7.2	7.5
1977	7.6	7.1	7.3	7.4	6.7	7.5	7.4	6.7	6.3	5.6	6.4	7.0	6.9
1978	7.3	7.0	7.5	8.0	7.8	7.7	8.0	7.4	6.9	6.7	6.1	6.1	7.2
1979	6.4	6.1	6.8	7.3	6.6	6.0	6.4	6.0	5.4	5.6	5.7	6.0	6.2
1980	6.2	5.7	6.0	6.6	5.9	5.7	5.6	5.9	5.2	5.2	5.5	5.8	5.8
1981	6.4	6.5	7.2	6.7	6.6	6.8	7.1	6.6	5.6	5.3	5.7	5.4	6.3
1982	6.0	6.3	6.3	6.0	5.7	5.8	6.1	5.8	6.0	5.8	5.7	6.1	6.0
1983	6.0	6.2	6.9	7.7	8.8	8.5	7.4	8.6	6.5	5.8	5.8	5.8	7.0
1984	5.9	5.7	6.5	6.3	5.4	5.6	6.3	5.7	5.5	5.9	5.8	6.5	5.9
1985	7.1	7.3	7.5	7.4	7.2	6.9	7.6	6.4	6.4	5.7	6.9	7.3	7.0
1986	7.3	7.0	8.0	7.9	7.2	7.1	6.6	6.7	6.7	6.1	5.8	5.7	6.8
1987 ^{2/}	6.7	6.1	6.6	5.8	5.6								
BROILER/FEED, U.S. basis ^{6/}													
1971	2.9	2.7	2.7	2.5	2.8	3.1	3.1	2.7	2.8	3.0	3.3	3.0	2.9
1972	3.2	2.9	2.7	2.6	2.9	3.1	3.5	3.9	3.3	2.9	3.4	4.0	3.2
1973	3.5	2.9	2.5	2.3	2.5	2.8	2.7	2.7	2.7	2.5	2.6	2.3	2.7
1974	2.6	2.5	2.6	2.4	2.7	2.9	2.9	2.8	3.1	3.4	3.7	2.6	2.9
1975	3.6	3.5	3.4	3.0	3.1	3.2	3.1	3.0	3.1	2.8	2.8	2.7	3.1
1976	2.5	2.4	2.3	2.3	2.5	2.7	2.7	2.6	2.6	2.7	3.0	2.9	2.6
1977	3.1	3.0	2.7	2.6	2.8	3.0	3.0	3.3	3.3	3.5	3.7	3.1	3.1
1978	3.1	2.9	2.8	2.9	3.1	3.3	3.1	3.0	3.2	2.9	2.5	2.3	2.9
1979	2.4	2.2	2.6	2.7	2.8	2.6	2.5	2.3	2.6	2.6	3.3	3.0	2.6
1980	2.9	2.8	2.5	2.5	2.6	2.6	2.6	2.3	2.4	2.6	2.6	2.5	2.6
1981	2.4	2.4	2.4	2.3	2.6	2.6	2.6	2.5	2.6	2.7	2.6	2.5	2.5
1982	2.6	2.5	2.5	2.5	2.6	2.7	2.4	2.3	2.4	2.6	2.8	2.8	2.6
1983	2.7	2.5	2.8	2.9	3.1	3.1	3.1	2.7	2.7	2.7	3.0	2.7	2.8
1984	2.8	2.6	2.8	2.7	2.9	2.9	2.8	2.8	3.1	3.2	3.1	3.1	2.9
1985	3.2	3.1	3.5	3.2	3.2	3.1	3.1	3.1	3.4	3.7	4.5	4.6	3.4
1986	3.8	4.4	3.9	3.5	3.6	3.5	3.3	3.2	3.3	3.0	2.9	3.3	3.5
1987	3.0	2.6	2.7	2.5	2.8								
TURKEY/FEED, U.S. basis ^{7/}													
1971	4.7	4.7	4.8	5.1	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.4	4.7
1972	4.3	4.3	4.5	4.4	4.0	3.7	4.1	4.8	4.2	3.8	3.9	4.3	4.2
1973	4.9	5.0	5.3	4.8	4.0	3.8	3.8	3.4	3.2	3.1	2.9	2.9	3.9
1974	3.0	3.0	3.3	3.6	3.6	3.7	3.8	3.6	3.8	3.9	4.2	4.2	3.6
1975	4.2	4.3	4.5	4.4	4.0	3.9	4.0	3.9	3.9	3.5	3.3	3.4	3.9
1976	3.4	3.5	3.5	3.7	3.5	3.4	3.6	3.4	3.4	3.5	3.5	3.8	3.5
1977	4.0	4.3	4.5	4.5	4.3	4.2	4.3	4.2	4.3	4.4	4.5	4.8	4.4
1978	4.9	5.0	5.1	5.4	5.0	4.6	4.3	4.3	4.2	3.9	3.5	3.7	4.5
1979	3.7	3.9	4.5	4.3	3.8	3.6	3.5	3.4	3.1	3.1	3.5	3.5	3.7
1980	3.7	4.0	3.9	3.5	3.1	3.1	3.2	3.0	3.0	3.3	3.3	3.2	3.4
1981	3.1	2.8	3.1	2.9	3.0	3.0	3.0	3.0	3.0	3.2	3.4	3.5	3.1
1982	3.8	3.9	3.9	3.0	2.9	2.9	2.9	2.7	2.9	3.0	2.8	2.8	3.1
1983	3.0	3.0	3.1	3.5	3.6	3.2	3.3	3.3	3.3	3.3	3.6	3.8	3.3
1984	3.9	4.4	5.0	5.5	4.7	3.8	3.7	3.7	3.7	3.8	4.2	4.5	4.2
1985	5.0	5.5	5.5	5.5	3.4	3.4	3.5	3.8	3.5	4.3	4.5	4.6	4.4
1986	4.7	4.9	4.8	4.0	3.3	3.4	3.6	3.5	3.3	3.3	3.1	2.9	3.7
1987	2.8	2.8	3.1	3.5	2.8								

^{1/} Bushels of corn equal in value to 100 pounds of hog, live weight. ^{2/} Preliminary. ^{3/} Based on price of Choice beef-steers, 900-1,100 pounds. ^{4/} Pounds of 16-percent mixed dairy feed equal in value to 1 pound whole milk. ^{5/} Pounds of laying feed equal in value to 1 dozen eggs. ^{6/} Pounds of broiler grower feed equal in value to 1 pound broiler, live weight. ^{7/} Pounds of turkey grower feed equal in value to 1 pound of turkey, live weight. *Beginning March 1986 data reported shifted from monthly to quarterly. Monthly data reported in May 1987 Agricultural Prices.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Table 11.--Byproduct feeds: Average wholesale price a ton, bulk, specified markets, by months, 1970 to date

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Dollars per ton													
Distillers' dried grains, Lawrenceburg, Indiana													
1970	61.00	64.75	66.75	66.90	68.25	68.75	64.50	61.00	61.00	61.00	64.00	65.00	64.41
1971	66.60	61.00	59.00	58.00	59.00	58.70	58.00	60.10	62.25	64.25	64.00	65.10	61.33
1972	124.50	70.60	73.50	77.50	87.30	98.75	103.60	98.00	95.70	126.50	126.40	141.75	102.00
1973	154.10	119.20	117.50	126.25	129.70	123.90	106.25	94.00	90.50	92.75	98.00	120.00	114.35
1974	123.20	123.80	147.50	136.00	127.50	115.50	102.00	99.20	100.25	102.00	107.60	119.25	116.98
1975	125.50	121.75	110.40	97.60	107.75	114.50	107.60	102.50	101.50	110.20	123.00	126.40	112.39
1976	104.40	127.25	126.00	133.00	141.25	145.00	142.60	141.00	143.50	143.10	130.75	110.70	132.38
1977	113.60	112.25	117.10	123.00	124.60	124.00	123.75	123.00	124.00	125.60	124.50	118.60	121.17
1978	143.70	116.00	122.00	128.50	130.00	130.00	128.00	121.50	120.30	122.90	131.40	139.00	127.78
1979	160.00	153.00	147.50	145.00	143.60	134.70	124.00	121.10	122.60	126.00	132.00	144.50	137.83
1980	150.00	165.75	171.25	175.20	175.25	167.50	153.00	145.10	155.25	164.40	164.50	156.00	161.93
1981	150.00	151.25	153.75	148.00	146.25	147.60	139.40	136.50	142.00	147.00	153.00	145.25	146.67
1982	137.60	136.25	137.00	137.00	138.75	136.75	140.20	144.50	147.00	150.20	150.60	155.60	142.62
1983	167.50	175.00	183.20	189.75	190.00	185.00	173.50	165.50	168.00	165.75	156.60	147.75	172.30
1984	139.00	120.10	96.50	93.00	94.25	96.00	94.00	87.40	83.25	85.00	88.75	95.50	97.73
1985	96.50	99.70	105.25	110.80	115.00	113.75	109.50	112.40	111.90	109.75	102.10	--	107.88
1986	131.50	129.00	128.60	124.80	113.25	110.10	105.10	100.75	111.10	116.00	118.25	--	117.13
1987	118.00	118.25	122.50	128.40	138.75								
Brewers' dried grains, Milwaukee													
1970	57.30	56.90	54.50	55.90	60.90	56.50	49.40	46.50	48.75	49.20	45.50	46.90	52.35
1971	46.90	47.50	48.00	50.50	56.10	51.90	49.50	51.25	51.70	49.40	46.00	50.80	49.96
1972	60.10	67.80	74.90	87.00	95.00	93.25	76.50	66.10	93.30	106.75	82.20	108.75	84.30
1973	98.50	112.60	117.60	122.25	122.40	103.00	81.25	88.90	81.50	63.40	81.60	119.40	99.36
1974	97.25	111.00	120.25	108.80	98.50	71.00	75.40	92.10	72.40	74.25	86.10	92.40	91.62
1975	86.80	99.00	93.25	89.00	104.40	92.60	95.60	84.90	88.20	96.60	100.90	105.90	94.76
1976	120.50	119.00	120.60	130.10	134.50	127.10	114.40	105.00	126.75	121.10	86.75	82.80	115.72
1977	85.00	88.60	98.10	108.25	101.20	89.50	93.00	88.00	82.40	87.00	75.75	74.20	89.25
1978	92.25	104.60	112.00	113.50	113.20	111.75	100.75	81.20	89.00	107.50	115.00	109.50	104.19
1979	116.00	124.80	115.10	116.70	120.80	109.00	96.25	93.00	105.25	103.75	107.00	115.00	110.22
1980	118.60	133.75	145.25	149.00	149.25	121.75	93.80	110.50	114.10	94.20	85.00	95.75	117.58
1981	99.60	109.25	117.50	99.40	103.25	97.50	85.00	95.75	98.50	89.00	88.00	87.40	97.52
1982	91.25	102.90	102.40	108.50	113.10	97.60	95.60	104.25	104.00	102.00	106.00	108.60	103.02
1983	122.25	127.75	128.10	136.00	141.00	136.25	123.50	106.00	98.40	102.40	88.00	80.25	115.82
1984	83.80	77.30	63.40	78.25	86.40	61.25	46.25	47.00	53.10	70.00	60.50	50.60	64.82
1985	70.60	74.50	71.25	93.00	106.25	71.90	58.10	81.50	78.75	67.10	61.25	61.25	74.62
1986	68.70	83.10	101.25	118.00	100.60	61.50	50.50	68.00	81.90	77.00	71.90	78.10	80.04
1987	85.00	91.90	105.60	113.00	118.75								
Corn gluten feed, 21% protein, Illinois Points													
1970	50.00	52.50	54.00	57.00	59.00	50.25	50.00	48.50	48.00	48.00	45.00	41.60	50.32
1971	40.00	40.00	44.00	51.00	52.75	47.20	48.50	48.75	46.40	43.50	45.10	48.00	46.27
1972	49.75	54.40	58.80	68.50	79.80	79.25	77.25	66.00	72.00	78.25	79.00	97.00	71.67
1973	92.25	92.50	94.40	105.75	108.20	85.25	79.00	74.60	75.75	72.00	83.00	120.70	90.28
1974	91.00	100.00	103.75	92.80	90.25	80.50	77.00	88.40	80.00	81.60	83.90	91.50	88.39
1975	88.60	90.25	86.50	87.60	92.75	87.00	83.00	82.50	90.00	98.10	106.00	107.90	91.68
1976	114.00	115.10	108.00	117.50	125.25	122.00	110.60	114.80	117.50	108.80	89.00	80.40	110.25
1977	78.00	78.00	89.60	103.25	101.60	91.50	89.00	91.00	89.60	88.00	88.00	89.60	89.76
1978	96.25	107.60	113.50	115.40	118.60	122.00	121.60	120.50	117.90	122.50	131.00	130.00	118.07
1979	129.00	134.00	132.50	135.00	140.00	138.75	120.60	105.00	113.75	113.75	116.00	123.70	125.17
1980	130.00	126.25	131.25	138.00	140.00	120.00	114.50	121.25	122.40	111.00	101.75	107.25	121.97
1981	108.50	110.00	110.00	113.80	117.00	117.00	112.00	112.00	112.00	112.00	114.25	110.40	112.41
1982	115.00	109.50	111.20	120.00	125.00	117.50	112.80	110.00	111.75	114.00	120.00	127.00	116.15
1983	135.00	140.60	136.00	136.25	135.00	118.75	111.25	113.75	106.00	83.75	79.70	78.75	114.57
1984	69.40	76.00	80.10	80.60	79.80	73.90	61.60	59.70	63.25	68.50	74.10	78.00	72.08
1985	81.25	86.60	89.00	91.80	92.50	89.60	97.10	96.00	90.00	87.50	84.30	88.10	89.48
1986	97.80	105.50	109.75	99.20	97.90	98.10	99.60	98.40	96.90	93.80	91.25	92.40	98.38
1987	96.50	98.50	106.00	110.00	118.00								

Continued...

Table 11.—Byproduct feeds: Average wholesale price a ton, bulk, specified markets, by months, 1970 to date—continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Dollars per ton													
Corn gluten meal, 60% protein, Illinois Points													
1970	146.00	143.00	134.50	130.00	130.50	132.00	132.00	132.00	134.00	134.00	136.00	135.60	134.97
1971	131.00	126.00	121.60	118.75	121.25	125.20	130.50	137.00	142.00	146.50	149.25	150.80	133.32
1972	143.00	133.00	132.80	158.00	191.20	238.50	266.25	257.00	303.60	394.50	316.30	276.00	234.18
1973	221.25	210.70	200.75	234.25	246.80	267.75	267.50	254.00	204.90	180.00	214.50	263.40	230.48
1974	217.75	221.60	217.50	204.00	198.50	181.25	191.50	209.60	211.00	212.00	215.20	222.00	208.49
1975	229.20	237.75	238.25	241.00	248.00	254.00	250.80	208.10	185.50	209.30	257.40	270.20	235.79
1976	294.00	298.00	267.80	246.00	258.00	288.75	297.80	287.50	296.00	294.40	275.90	208.20	276.03
1977	182.00	182.60	215.30	243.75	250.00	250.00	248.75	245.50	220.00	213.75	201.75	216.00	222.45
1978	232.75	249.20	243.75	243.75	252.60	271.90	280.00	270.00	234.00	241.75	304.10	325.00	262.40
1979	316.90	275.00	260.60	263.10	269.00	246.25	222.50	206.00	211.90	220.00	233.00	268.10	249.36
1980	302.00	288.75	296.25	302.00	307.50	292.50	239.00	235.00	256.25	261.00	237.50	249.40	272.26
1981	260.00	245.25	244.40	260.50	275.00	271.25	243.00	225.00	225.00	228.00	237.50	229.50	245.37
1982	221.25	207.50	215.00	246.25	265.00	267.50	251.00	238.75	235.00	213.00	242.50	300.00	241.90
1983	326.25	308.75	283.00	275.00	284.00	258.75	245.00	256.25	271.00	266.25	236.75	218.75	269.15
1984	213.80	211.30	215.60	240.00	232.00	215.60	203.75	191.00	172.50	169.20	174.50	198.10	203.11
1985	211.25	208.70	208.75	219.50	219.40	208.10	198.75	192.90	210.60	216.90	211.50	206.25	209.38
1986	208.00	222.50	230.60	241.50	232.20	206.25	208.50	213.10	226.40	267.80	268.75	240.60	230.52
1987	259.50	278.75	305.60	313.50	309.40								
Meat and bone meal, Kansas City													
1970	96.00	96.60	101.10	101.50	102.90	93.75	99.30	92.75	92.10	95.60	94.75	98.00	97.03
1971	98.25	96.40	94.00	95.00	100.00	104.40	118.90	121.25	117.50	118.75	127.40	131.30	110.26
1972	126.90	134.20	154.40	184.40	224.00	266.25	240.00	192.50	315.00	398.10	343.50	355.00	244.52
1973	201.90	174.00	220.00	328.75	306.00	221.25	160.00	139.00	143.75	138.10	175.00	196.25	200.33
1974	135.00	183.00	153.10	155.40	152.50	137.50	137.50	151.00	149.40	156.90	162.00	168.10	153.45
1975	154.00	150.50	141.90	150.50	158.10	158.10	159.00	163.10	205.00	253.50	232.50	184.00	175.85
1976	203.75	183.75	210.50	240.00	261.25	237.50	259.00	288.75	270.00	222.00	168.75	169.50	226.23
1977	193.75	183.75	210.00	186.40	189.00	186.25	241.90	210.60	204.50	210.00	204.40	202.50	201.92
1978	218.75	233.50	228.60	230.00	229.50	266.90	264.40	253.10	239.50	265.00	254.50	219.40	241.93
1979	238.10	236.50	233.75	231.90	229.50	248.20	253.75	208.50	183.75	194.40	255.50	248.60	230.20
1980	275.50	288.60	300.60	264.50	258.75	237.50	231.50	245.00	246.25	235.00	247.50	240.10	255.90
1981	234.50	230.25	221.90	211.00	206.25	209.40	211.00	220.60	208.75	208.00	204.40	192.00	213.17
1982	186.25	183.75	209.30	210.60	225.00	232.50	231.00	246.90	213.10	199.50	198.75	244.50	215.10
1983	237.50	216.25	238.50	234.40	236.00	209.40	227.50	218.75	214.00	196.90	176.50	169.40	214.59
1984	162.80	178.00	177.50	175.60	175.70	173.10	146.25	126.40	108.10	120.00	130.40	140.60	151.20
1985	151.25	164.75	170.60	173.50	168.75	152.80	160.00	150.00	170.90	175.00	173.20	178.40	165.76
1986	187.10	183.10	189.40	198.50	175.25	173.10	178.60	191.90	216.90	222.00	222.40	209.75	195.67
1987	212.50	221.00	233.20	242.50	238.75								
Fish meal, 65% protein: Domestic, East Coast													
1970	174.00	188.10	190.00	187.00	182.00	178.75	179.00	174.50	170.00	154.30	152.75	162.00	174.37
1971	160.00	160.00	160.00	162.00	164.00	165.00	165.25	160.25	180.20	176.75	179.50	191.00	168.73
1972	199.00	216.00	231.25	280.00	375.00	411.90	420.00	407.50	465.00	570.00	536.00	490.60	383.52
1973	462.50	420.00	411.25	587.50	538.00	446.25	405.00	337.00	276.25	258.75	252.00	312.50	392.25
1974	271.25	299.00	298.75	275.00	256.25	228.75	220.00	240.00	225.00	219.00	237.50	251.25	251.81
1975	257.00	268.75	270.00	267.00	271.90	272.00	279.00	270.00	282.50	352.50	383.75	332.50	292.24
1976	366.25	363.10	368.50	402.50	405.00	423.10	437.50	481.25	489.50	421.25	313.30	319.40	399.22
1977	335.00	342.50	353.00	363.75	365.00	362.50	377.50	395.00	373.00	356.25	316.90	333.50	356.16
1978	353.75	370.00	388.75	391.25	388.00	383.75	395.00	406.25	390.00	375.00	382.00	355.00	381.56
1979	353.75	366.00	370.00	381.25	391.50	403.75	398.75	375.00	355.00	342.50	365.00	380.00	373.54
1980	427.00	460.00	502.50	490.00	468.75	421.25	405.00	418.75	413.75	404.00	391.25	365.00	430.00
1981	378.00	383.75	370.00	354.00	370.00	377.50	377.00	360.00	360.00	335.00	306.25	315.50	357.25
1982	311.25	324.25	346.00	370.00	375.00	370.00	363.00	362.50	357.50	336.50	325.00	397.00	353.17
1983	415.00	425.00	423.50	407.50	392.60	373.75	383.75	381.25	360.00	354.00	329.00	298.75	378.68
1984	291.90	295.00	309.50	308.25	308.90	290.90	280.60	280.00	231.75	208.90	205.80	207.25	268.23
1985	240.50	284.50	259.00	297.50	291.00	287.50	320.00	290.00	286.90	272.50	278.00	303.10	284.21
1986	320.40	318.00	317.50	315.80	313.30	315.75	N.Q.	N.Q.	335.80	359.50	353.75	363.10	331.29
1987	364.30	372.50	401.25	449.50	448.75								

Continued--

Table 11.—Byproduct feeds: Average wholesale price a ton, bulk, specified markets, by months, 1970 to date—continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
Dollars per ton													
Hominy feed, Illinois Points													
1970	49.80	45.90	47.20	53.30	52.40	43.40	46.70	47.90	45.10	47.00	45.50	40.30	47.0
1971	33.50	36.25	38.60	44.10	40.60	35.90	38.75	41.25	34.30	33.75	37.50	42.10	38.0
1972	47.60	44.80	49.40	54.50	54.50	47.90	47.90	43.25	63.20	77.60	73.60	98.75	58.5
1973	76.00	81.50	90.75	95.00	92.20	90.90	88.40	87.20	79.90	79.10	101.00	124.75	90.5
1974	99.10	116.00	115.00	103.00	93.00	74.75	74.75	87.50	78.20	79.75	80.00	91.60	91.0
1975	93.00	82.90	81.25	81.80	83.00	81.00	77.30	75.40	85.90	94.20	99.90	90.10	85.4
1976	92.40	85.40	76.60	83.90	83.90	82.25	73.90	79.75	78.50	76.70	62.90	50.70	77.2
1977	57.00	61.50	67.40	75.00	67.70	70.50	72.25	72.60	78.10	81.25	67.50	63.70	69.5
1978	65.10	68.50	78.10	69.50	69.20	76.75	71.90	73.00	83.60	91.00	94.20	93.75	77.8
1979	94.70	85.70	82.50	91.20	84.80	75.00	77.50	79.00	82.00	81.25	90.00	106.00	85.8
1980	116.20	105.75	118.50	121.80	118.25	103.50	99.80	111.25	108.25	95.90	99.75	94.00	107.7
1981	88.10	88.25	83.75	79.60	81.75	69.00	65.20	79.50	85.00	85.80	81.75	70.90	79.8
1982	73.90	73.00	82.00	79.60	77.90	80.75	88.60	107.00	109.50	109.00	112.75	116.80	92.57
1983	121.50	118.75	122.20	117.50	114.40	105.50	108.25	109.75	102.80	102.75	96.90	97.50	109.82
1984	101.80	88.70	76.90	78.75	81.00	73.90	70.25	78.70	82.75	78.30	83.10	80.25	81.20
1985	76.75	76.50	77.25	85.80	85.00	84.90	84.50	86.40	85.25	82.50	72.40	74.25	80.96
1986	75.00	61.60	65.75	64.40	60.50	58.75	51.50	52.75	67.00	69.40	73.60	70.75	64.25
1987	64.70	65.60	71.00	80.20	80.40								
Dehydrated alfalfa meal—17% protein (reground), Kansas City													
1970	46.00	46.20	48.40	48.90	48.90	49.90	50.70	52.50	49.25	44.60	45.75	46.00	48.09
1971	46.00	46.00	46.80	48.75	49.75	49.70	49.70	49.40	49.70	45.80	47.10	48.20	48.08
1972	50.00	53.00	62.60	75.70	92.80	106.70	94.80	70.80	71.40	72.70	74.50	83.20	75.68
1973	77.60	101.50	103.60	104.70	104.80	102.60	94.20	82.00	75.40	68.20	76.70	93.75	90.42
1974	89.75	92.00	89.25	87.00	84.25	77.10	74.40	75.90	77.00	74.70	76.60	81.50	81.62
1975	82.60	87.30	92.40	98.70	110.20	108.20	111.40	108.40	91.40	94.20	99.90	103.00	98.98
1976	115.20	115.50	111.10	112.10	112.80	111.30	104.25	95.30	91.40	85.00	74.90	66.40	99.60
1977	64.30	67.90	70.90	74.40	73.20	72.80	80.90	82.60	77.50	76.20	76.90	77.20	74.57
1978	81.20	92.90	98.90	99.20	100.60	103.50	105.10	104.60	102.30	99.50	102.80	98.80	99.12
1979	100.80	111.00	112.10	112.60	112.60	112.80	110.60	104.90	100.10	96.80	104.00	118.10	108.03
Molasses beet pulp, Los Angeles													
1970	48.00	48.30	48.30	53.90	57.70	57.70	57.70	57.70	57.00	55.20	55.40	55.40	54.36
1971	54.90	53.40	53.80	55.50	55.60	55.60	55.60	55.60	56.20	58.60	58.60	58.75	56.01
1972	59.25	59.60	61.60	66.60	73.80	73.80	73.80	73.20	71.30	72.60	71.30	71.30	69.01
1973	90.60	101.50	108.00	108.00	110.50	112.60	111.30	101.00	92.75	90.40	97.75	111.40	102.98
1974	128.25	130.00	131.00	126.60	117.50	108.75	96.00	85.40	87.00	84.75	90.90	104.90	107.59
1975	117.60	116.00	111.25	109.00	108.00	108.00	106.60	101.00	101.00	101.40	103.25	104.00	107.26
1976	103.50	101.75	101.75	101.40	99.70	101.75	105.00	100.90	99.00	96.70	94.90	91.60	99.83
1977	85.75	83.25	84.60	88.75	93.40	96.80	102.50	101.10	101.80	100.80	103.40	101.50	95.30
1978	102.75	109.10	113.75	115.00	116.80	118.00	118.00	113.00	110.00	111.75	118.50	120.50	113.93
1979	122.60	130.60	139.00	141.25	141.25	129.40	123.75	118.25	110.90	110.90	115.00	121.50	125.37
Molasses beet pulp, Los Angeles													
1980	127.50	127.40	134.60	142.00	143.90	152.50	N.Q.	137.60	130.75	123.00	122.60	119.25	132.83
1981	116.00	108.75	108.75	112.25	116.70	121.40	123.50	111.50	113.50	114.70	115.10	116.50	114.89
1982	114.60	119.00	119.00	122.90	121.40	120.00	123.00	124.50	125.00	123.00	119.10	120.20	120.90
1983	130.00	130.60	130.00	N.Q.	N.Q.	N.Q.	N.Q.	123.00	121.80	121.00	124.80	124.00	125.65
1984	118.00	120.30	123.50	124.60	129.50	130.00	125.10	120.10	112.60	105.50	105.90	106.00	118.42
1985	104.00	107.00	111.50	117.40	119.00	121.00	118.50	111.40	105.25	99.50	96.50	96.00	108.92
1986	91.40	90.00	91.90	95.80	103.00	105.00	101.00	94.60	88.75	88.50	88.50	89.50	94.00
1987	89.50	90.25	92.25	95.50	99.50								

N.Q.—No quotes.

Source: Grain and Feed Market News, AMS, USDA.

Table 12.—Corn, sorghum, barley, and oats exports, 1975/76 to date

Year and month	CORN			SORGHUM GRAIN	Year and month	BARLEY		OATS	
	Grain only	Total process	Grand total			Grain only	Total	Grain only	Total
Bushels					Bushels				
1975/76					1975/76				
Sept	75,053,640	1,901,587	76,955,227	27,989,402	June	836,264	975,155	57,472	61,893
Oct	132,616,891	1,149,080	133,765,971	15,087,217	July	1,950,140	2,047,409	206,451	405,851
Nov	165,253,446	954,713	166,208,159	23,107,812	Aug	940,220	1,013,720	156,478	311,810
1st Qtr	372,923,977	4,005,380	376,929,357	66,104,431	Sept	368,773	415,306	1,707,307	1,857,893
Dec	152,819,984	898,188	153,718,172	25,175,934	1st Qtr	4,095,405	4,451,590	2,127,708	2,637,447
Jan	137,508,424	888,234	138,396,658	28,001,006	Oct	3,232,356	3,290,346	2,690,909	2,782,316
Feb	136,307,142	889,938	137,197,080	19,016,748	Nov	1,374,011	1,430,450	2,673,189	2,828,325
2nd Qtr	426,835,550	2,676,360	429,511,910	72,194,568	Dec	4,890,030	4,971,035	2,451,702	2,405,337
Mar	128,992,136	1,110,091	130,102,227	21,010,049	2nd Qtr	9,505,205	9,691,031	7,015,000	8,095,978
Apr	164,220,528	1,145,567	165,366,095	16,787,280	Jan	1,015,730	1,099,219	92,717	227,968
May	153,177,354	860,161	154,037,515	3,622,364	Feb	137,089	260,500	164,429	332,902
3rd Qtr	446,390,018	3,115,819	449,505,837	41,420,493	Mar	2,081,973	2,204,333	96,554	102,936
June	159,436,466	1,202,546	160,639,012	7,894,661	3rd Qtr	3,235,592	3,572,052	353,700	663,806
July	138,125,613	1,200,167	139,325,780	22,413,313	Apr	1,330,542	1,404,961	196,085	505,098
Aug	120,781,441	1,015,301	121,796,742	22,054,372	May	4,634,179	4,654,198	1,783,345	1,807,957
4th Qtr	418,343,520	3,418,014	421,761,534	52,362,346	4th Qtr	3,964,721	6,059,159	1,979,430	2,313,055
TOTAL	1,664,493,065	13,215,573	1,677,708,638	232,161,838	TOTAL	22,800,923	23,774,632	12,276,718	13,710,286
1976/77					1976/77				
Sept	109,747,811	875,408	110,623,219	24,870,524	June	1,303,146	1,462,324	365,100	399,404
Oct	178,936,003	816,467	179,752,470	16,635,698	July	3,287,074	3,355,973	61,659	253,988
Nov	180,098,843	974,715	181,073,558	20,549,541	Aug	3,478,167	3,498,931	2,244,591	2,297,468
1st Qtr	468,782,657	2,666,590	471,476,247	62,055,763	Sept	6,615,438	6,722,402	1,920,409	1,928,142
Dec	136,223,158	891,377	137,114,535	24,648,500	1st Qtr	14,683,025	15,039,630	4,591,759	4,879,002
Jan	126,956,735	757,643	127,714,378	25,601,274	Oct	13,048,078	13,356,005	570,607	867,353
Feb	119,422,523	998,871	120,421,394	30,474,048	Nov	7,064,569	7,271,589	2,149,816	2,187,001
2nd Qtr	382,602,416	2,647,891	385,250,307	80,724,622	Dec	7,109,317	7,222,045	603,985	630,520
Mar	150,674,935	734,269	151,409,204	27,022,891	2nd Qtr	27,221,964	27,849,639	3,324,408	3,684,874
Apr	141,387,428	993,996	142,381,424	20,838,684	Jan	3,290,070	3,300,086	84,305	146,665
May	138,834,555	927,246	139,761,801	13,598,209	Feb	8,340,213	8,453,835	29,925	167,523
3rd Qtr	430,896,918	2,655,511	433,552,429	61,459,784	Mar	975,520	1,069,154	57,808	217,299
June	125,506,250	1,323,324	126,829,574	10,599,319	3rd Qtr	12,613,811	12,903,075	172,198	531,487
July	116,130,094	1,038,968	117,169,062	20,078,292	Apr	1,620,641	1,798,769	26,399	191,167
Aug	121,200,994	1,068,623	122,269,617	18,996,553	May	8,647,500	8,739,038	179,887	351,199
4th Qtr	362,837,338	3,430,915	366,268,253	49,674,164	4th Qtr	10,268,141	10,537,807	206,286	542,366
TOTAL	1,645,119,329	11,400,907	1,656,547,236	253,914,333	TOTAL	64,787,741	66,330,151	8,294,651	9,637,729
1977/78					1977/78				
Sept	137,146,892	1,095,916	138,242,808	17,077,461	June	7,678,469	7,749,102	485,973	621,814
Oct	118,932,956	1,155,447	120,088,403	8,628,406	July	11,291,749	11,439,168	412,342	566,723
Nov	143,025,556	893,055	143,918,611	17,228,249	Aug	6,149,089	6,260,217	1,064,326	1,109,150
1st Qtr	399,105,404	3,144,418	402,249,822	42,934,116	Sept	9,278,826	9,462,496	48,597	359,154
Dec	153,111,226	1,207,979	154,319,205	30,106,414	1st Qtr	34,398,133	34,910,983	2,011,238	2,656,841
Jan	126,914,873	923,086	127,837,959	21,237,901	Oct	8,026,753	8,071,324	1,155,584	1,289,871
Feb	127,836,745	829,941	128,666,686	22,910,641	Nov	2,186,923	2,354,670	2,896,689	3,064,137
2nd Qtr	407,862,844	2,961,006	410,823,850	74,254,956	Dec	3,856,164	4,003,955	2,369,271	2,428,974
Mar	156,643,619	1,393,115	158,036,734	23,826,344	2nd Qtr	14,069,840	14,429,949	6,421,544	6,782,982
Apr	160,804,806	1,043,694	161,848,500	17,768,956	Jan	1,413,634	1,597,572	217,675	406,388
May	206,846,481	1,455,592	208,302,073	18,074,476	Feb	271,263	466,385	394,969	682,456
3rd Qtr	524,294,906	3,892,401	528,187,307	59,669,776	Mar	145,741	258,834	28,124	445,153
June	214,018,311	751,873	214,770,184	10,145,984	3rd Qtr	1,830,638	2,322,791	640,768	1,533,997
July	171,102,334	987,750	172,090,084	19,738,833	Apr	2,017,960	2,269,261	23,525	261,335
Aug	180,012,802	1,074,040	181,086,842	16,098,547	May	3,180,917	3,272,925	905,099	1,036,135
4th Qtr	565,133,447	2,813,663	567,947,110	45,983,364	4th Qtr	5,198,877	5,542,186	929,424	1,297,470
TOTAL	1,896,396,601	12,811,488	1,909,208,089	222,842,212	TOTAL	55,497,480	57,205,909	10,002,974	12,271,290

Continued—

Table 12.—Corn, sorghum, barley, and oats exports, 1975/76 to date—continued

Year and month	CORN			SORGHUM GRAIN	Year and month	BARLEY		OATS	
	Grain only	Total process	Grand total			Grain only	Total	Grain only	Total
	Bushels					Bushels			
1978/79					1978/79				
Sept	176,033,904	827,179	176,861,083	7,735,700	June	4,205,002	4,353,093	435,464	588,122
Oct	139,263,490	718,259	139,981,749	8,615,589	July	5,066,677	5,156,021	1,303,880	1,668,021
Nov	153,542,028	771,927	154,313,955	18,954,600	Aug	4,929,079	5,006,603	5,293,313	5,389,592
					Sept	4,242,932	4,291,050	48,251	250,893
1st Qtr	468,839,422	2,317,365	471,156,787	35,305,889	1st Qtr	18,443,690	18,806,767	7,080,908	7,876,628
Dec	158,883,560	826,213	159,709,773	18,980,714	Oct	3,000,214	3,167,923	1,343,835	1,576,218
Jan	129,906,845	949,696	130,856,541	19,205,305	Nov	978,381	1,019,054	285,557	519,770
Feb	124,518,081	576,007	125,094,088	26,989,459	Dec	266,814	471,044	1,227,047	1,336,346
2nd Qtr	413,308,486	2,351,916	415,660,402	65,263,558	2nd Qtr	4,325,409	4,658,021	2,856,439	3,432,334
Mar	169,263,126	1,040,501	170,303,627	22,069,207	Jan	574,365	602,389	41,947	283,427
Apr	187,095,271	986,476	188,081,747	13,038,349	Feb	46,265	107,278	28,584	130,700
May	198,288,881	846,694	199,135,575	14,922,212	Mar	3,735	41,817	54,088	288,819
3rd Qtr	554,647,278	2,873,671	557,520,949	50,029,768	3rd Qtr	624,365	831,484	124,619	710,946
June	229,474,993	1,302,191	230,777,184	9,452,058					
July	221,669,115	1,002,267	222,671,382	13,011,285	Apr	220,154	309,868	81,658	237,250
Aug	225,178,576	706,245	225,884,821	17,029,193	May	1,035,595	1,091,820	195,887	418,606
4th Qtr	676,322,684	3,010,703	679,333,387	39,492,536	4th Qtr	1,255,749	1,401,688	277,545	655,856
TOTAL	2,113,117,870	10,553,655	2,123,671,525	190,091,751	TOTAL	24,649,213	25,697,960	10,339,511	12,675,764
1979/80					1979/80				
Sept	185,070,433	1,176,418	186,246,851	24,223,910	June	2,212,317	2,282,851	120,868	247,616
Oct	214,345,983	1,180,577	215,526,560	21,583,642	July	2,446,725	2,527,595	42,528	140,915
Nov	221,857,150	1,150,649	223,007,799	26,229,212	Aug	2,719,552	2,811,124	105,109	254,874
					Sept	2,221,823	2,276,736	144,474	211,556
1st Qtr	621,273,566	3,507,644	624,781,210	72,036,764	1st Qtr	9,600,417	9,898,306	412,979	854,961
Dec	223,411,029	945,756	224,356,785	26,386,501	Oct	9,284,368	9,514,648	95,188	164,665
Jan	189,912,018	1,021,787	190,929,805	37,438,737	Nov	8,143,400	8,336,890	870,027	984,369
Feb	184,412,948	1,103,682	185,516,630	39,082,513	Dec	4,218,627	4,500,253	645,337	726,279
2nd Qtr	597,735,995	3,067,225	600,803,220	102,907,751	2nd Qtr	21,646,395	22,351,791	1,610,552	1,875,313
Mar	204,333,868	1,211,774	205,545,642	32,000,475	Jan	3,042,486	3,173,696	90,074	275,844
Apr	213,500,454	1,021,506	214,521,960	35,394,225	Feb	3,641,515	3,911,450	18,760	97,572
May	169,938,362	1,165,650	171,104,012	24,939,765	Mar	3,843,733	4,052,579	60,276	89,764
3rd Qtr	587,772,684	3,398,930	591,171,614	92,334,465	3rd Qtr	10,527,534	11,137,725	177,110	463,180
June	191,853,582	1,305,390	193,158,972	24,957,177					
July	196,938,173	1,418,319	198,356,492	22,312,730	Apr	6,525,141	6,692,569	229,439	418,534
Aug	205,942,297	1,112,430	207,054,727	15,122,775	May	4,520,778	4,747,733	327,568	430,051
4th Qtr	594,734,052	3,836,139	598,570,191	62,392,682	4th Qtr	11,045,919	11,440,302	557,007	849,305
TOTAL	2,401,516,297	13,809,938	2,415,326,235	329,671,662	TOTAL	52,820,265	54,028,124	2,757,648	4,042,839
1980/81					1980/81				
Sept	202,462,112	1,065,907	203,528,019	19,533,279	June	5,022,971	5,097,866	580,924	1,006,889
Oct	240,698,485	1,581,013	242,279,498	22,543,461	July	3,628,339	3,702,871	327,415	785,586
Nov	244,706,069	1,165,206	245,871,275	25,367,196	Aug	9,211,534	9,349,242	638,725	1,101,431
					Sept	6,658,108	6,740,218	793,059	953,125
1st Qtr	687,866,666	3,812,126	691,678,792	67,443,936	1st Qtr	24,520,952	24,890,197	2,340,123	3,847,031
Dec	238,328,292	1,335,338	239,663,630	18,308,338	Oct	5,504,702	5,554,355	1,306,243	1,597,563
Jan	207,962,746	1,147,496	209,110,242	28,807,953	Nov	6,666,060	6,808,903	46,960	363,072
Feb	199,682,732	971,791	200,654,523	28,934,912	Dec	8,916,215	9,085,383	785,897	861,436
2nd Qtr	645,973,770	3,454,625	649,428,395	76,051,203	2nd Qtr	21,086,977	21,440,641	2,139,100	2,822,071
Mar	221,866,761	1,243,104	223,109,865	26,318,245	Jan	6,315,403	6,388,116	189,156	573,991
Apr	184,884,549	1,749,260	186,633,809	19,487,235	Feb	11,466,729	11,500,117	1,087,421	1,400,038
May	207,201,786	1,892,894	209,094,680	22,218,323	Mar	4,666,953	4,776,513	230,384	633,818
3rd Qtr	613,953,096	4,885,258	618,838,354	68,023,803	3rd Qtr	22,449,085	22,664,746	1,506,961	2,607,847
June	157,486,785	1,956,787	159,443,572	19,998,909					
July	146,636,959	1,437,410	148,074,369	29,469,237	Apr	3,516,330	3,542,993	1,560,078	2,260,296
Aug	139,188,454	1,326,449	140,514,903	32,171,898	May	4,087,044	4,173,387	1,293,251	1,730,912
4th Qtr	443,312,198	4,720,646	448,032,844	81,640,044	4th Qtr	7,603,374	7,716,380	2,853,329	3,991,200
TOTAL	2,391,105,730	16,872,655	2,407,978,385	293,158,986	TOTAL	75,660,300	76,719,964	8,839,513	13,268,157

Continued...

Table 12.—Corn, sorghum, barley, and oats exports, 1975/76 to date—continued

Year and month	CORN			SORGHUM GRAIN	Year and month	BARLEY		OATS	
	Grain only	Total process	Grand total			Grain only	Total	Grain only	Total
Bushels					Bushels				
1981/82					1981/82				
Sept	149,655,085	1,089,867	150,744,952	30,963,092	June	1,457,555	1,508,625	372,009	549,202
Oct	194,694,429	1,033,605	195,728,034	28,388,473	July	6,528,945	6,661,102	366,463	1,092,743
Nov	174,729,965	1,521,537	176,251,502	18,657,408	Aug	12,243,107	12,365,441	648,960	782,716
1st Qtr	519,079,479	3,645,009	522,724,488	78,008,973	Sept	11,902,257	12,026,473	436,435	793,982
Dec	172,337,796	1,214,177	173,551,973	30,772,465	Oct	16,462,060	16,507,711	202,460	505,977
Jan	150,895,856	731,745	151,627,601	29,552,315	Nov	8,631,927	8,722,744	59,430	402,684
Feb	146,989,364	759,913	147,749,277	19,453,452	Dec	7,636,656	7,746,899	72,350	266,238
2nd Qtr	470,223,016	2,705,835	472,928,851	79,778,232	2nd Qtr	32,730,643	32,977,354	334,240	1,174,899
Mar	189,001,536	1,064,830	190,066,366	25,206,333	Jan	8,332,073	8,455,568	114,472	443,737
Apr	194,887,043	868,330	195,755,373	13,509,047	Feb	8,008,777	8,207,953	122,192	265,405
May	211,950,747	1,247,897	213,198,644	8,259,377	Mar	5,887,140	6,474,477	99,231	450,891
3rd Qtr	595,839,326	3,181,057	599,020,383	47,054,757	3rd Qtr	22,307,990	23,137,990	335,895	1,160,033
June	179,668,292	774,943	180,443,235	11,386,253	Apr	3,008,701	3,863,179	38,448	553,340
July	119,477,568	1,038,849	120,516,417	20,242,006	May	7,403,111	7,517,119	154,417	446,421
Aug	112,474,351	1,478,937	113,953,288	23,142,497	4th Qtr	11,211,812	11,380,290	192,865	999,761
4th Qtr	411,620,211	3,292,729	414,912,940	54,770,756	TOTAL	98,382,309	100,057,291	2,686,867	6,553,316
TOTAL	1,996,762,032	12,824,630	2,009,586,662	259,612,718	1982/83				
1982/83					June	5,928,163	6,296,843	52,361	603,692
Sept	107,215,457	843,567	108,059,024	20,428,581	July	4,165,507	4,862,814	70,751	240,205
Oct	166,335,228	882,718	167,217,946	18,383,056	Aug	8,196,824	8,579,926	48,700	197,183
Nov	169,586,560	1,300,624	170,887,184	19,234,195	Sept	5,561,112	5,678,174	197,917	289,602
1st Qtr	443,137,245	3,026,909	446,164,154	58,045,832	1st Qtr	23,851,606	25,417,757	369,729	1,330,682
Dec	173,558,165	1,014,843	174,573,008	29,354,316	Oct	1,440,901	1,516,155	71,782	581,391
Jan	174,707,042	733,757	175,440,799	25,050,652	Nov	2,494,002	2,987,818	158,162	197,106
Feb	161,304,672	706,273	162,010,945	17,975,892	Dec	1,827,788	1,940,049	29,127	210,451
2nd Qtr	509,569,879	2,454,873	512,024,752	72,380,860	2nd Qtr	5,768,691	6,444,022	259,071	988,948
Mar	169,409,637	1,010,853	170,420,490	19,694,606	Jan	7,454,630	7,580,831	41,047	75,440
Apr	157,314,623	1,258,502	158,573,125	5,348,135	Feb	1,410,838	1,492,942	32,518	123,897
May	148,587,837	1,370,305	149,958,142	8,726,291	Mar	3,523,029	3,669,317	26,152	80,122
3rd Qtr	475,312,097	3,639,660	478,951,757	33,769,032	3rd Qtr	12,389,297	12,743,090	99,717	279,459
June	150,589,182	1,232,887	151,822,069	9,889,322	Apr	29,375	223,908	16,040	207,447
July	123,534,997	1,034,822	124,569,819	16,494,246	May	2,130,966	2,395,182	5,867	206,939
Aug	119,201,764	991,337	120,193,101	19,474,765	4th Qtr	2,160,341	2,619,170	21,907	414,386
4th Qtr	393,325,943	3,259,046	396,584,989	45,050,333	TOTAL	44,169,935	47,224,039	750,424	3,013,475
TOTAL	1,821,345,164	12,380,488	1,833,725,652	210,054,057	1983/84				
1983/84					June	1,749,270	1,962,746	20,066	170,314
Sept	142,605,075	1,677,443	144,282,518	24,843,392	July	1,219,801	1,332,753	85,615	276,124
Oct	154,746,149	841,962	155,588,111	22,517,772	Aug	5,850,487	5,950,159	16,399	190,354
Nov	196,023,261	1,151,966	197,175,227	20,090,581	Sept	14,055,167	14,152,120	66,102	120,532
1st Qtr	493,374,485	3,671,371	497,045,856	67,451,745	1st Qtr	22,882,733	23,397,778	188,182	757,324
Dec	175,217,363	959,324	176,176,687	19,536,615	Oct	8,017,640	8,100,296	348,182	489,411
Jan	172,472,646	921,914	173,394,560	27,006,928	Nov	9,025,053	9,128,165	84,892	128,597
Feb	158,202,220	769,726	158,971,946	25,013,805	Dec	15,402,481	15,638,039	42,383	128,719
2nd Qtr	505,892,229	2,650,964	508,543,193	71,557,348	2nd Qtr	32,445,174	32,866,500	475,457	746,727
Mar	176,408,558	1,345,395	177,553,953	25,761,817	Jan	7,544,651	7,820,115	27,417	88,611
Apr	174,344,582	997,912	175,342,494	14,599,452	Feb	5,797,474	6,047,572	15,377	47,266
May	162,845,594	1,538,074	164,383,668	14,890,486	Mar	10,841,262	11,217,537	39,239	198,298
3rd Qtr	513,398,734	3,881,381	517,280,115	55,251,755	3rd Qtr	24,183,387	25,085,224	82,033	334,175
June	110,199,008	2,052,462	112,251,470	10,354,830	Apr	5,570,656	5,968,499	171,313	220,808
July	128,242,982	1,825,250	130,068,232	21,979,636	May	3,735,785	4,106,217	24,589	113,676
Aug	135,289,472	1,050,371	136,339,843	17,884,104	4th Qtr	9,306,441	10,074,716	195,902	334,484
4th Qtr	373,731,462	4,928,083	378,659,545	50,218,570	TOTAL	88,817,735	91,424,218	941,574	2,172,710
TOTAL	1,886,396,910	15,131,799	1,901,528,709	244,479,418					

Continued--

Table 12--Corn, sorghum, barley, and oats exports, 1985/86 to date--continued

Year and month	CORN			SORGHUM GRAIN	Year and month	BARLEY		OATS	
	Grain only	Total process	Grand total			Grain only	Total	Grain only	Total
					Bushels				
1984/85					1984/85				
Sept.	107,064,816	951,331	108,016,147	26,778,001	June	4,668,354	4,884,210	16,340	204,7
Oct.	154,055,992	1,177,835	155,233,827	36,290,021	July	1,506,275	2,146,787	51,644	162,6
Nov.	242,124,317	842,579	242,966,896	22,711,771	Aug.	4,965,763	5,155,469	28,335	37,0
					Sept.	17,185,453	17,474,876	58,861	188,7
1st Qtr.	503,245,125	2,971,745	506,216,870	85,779,793	1st Qtr.	28,325,845	29,661,342	155,180	593,1
Dec.	206,686,724	99,686	207,683,410	25,549,874	Oct.	8,750,660	8,959,255	78,898	132,1
Jan.	208,081,216	765,323	208,846,539	29,096,442	Nov.	9,226,887	9,937,205	25,988	67,5
Feb.	165,648,304	1,697,044	167,345,348	32,640,358	Dec.	10,739,791	11,773,706	45,452	66,2
2cnd Qtr.	580,416,244	3,459,053	583,875,297	87,286,614	2nd Qtr.	28,717,338	30,670,166	150,338	265,9
Mar.	170,693,089	1,208,460	171,901,549	26,133,824	Jan.	6,023,494	7,154,739	27,349	56,3
Apr.	167,741,483	1,303,826	169,045,309	19,774,404	Feb.	4,249,537	4,712,199	44,293	107,7
May	136,292,380	1,659,421	137,951,801	17,817,664	Mar.	1,173,727	1,258,040	68,000	75,2
3rd Qtr.	474,726,952	4,171,707	478,898,659	63,725,892	3rd Qtr.	11,446,758	13,124,978	139,642	239,3
June	105,494,909	2,315,648	107,810,557	25,247,583					
July	95,527,431	1,230,827	96,758,258	18,747,724	Apr.	227,362	367,280	35,822	120,6
Aug.	90,839,919	986,860	91,826,779	16,117,507	May	2,937,606	3,013,712	13,925	48,3
4th Qtr.	291,862,259	4,533,335	296,395,594	60,112,814	4th Qtr.	3,164,986	3,380,992	49,747	169,0
Total	1,850,250,580	15,135,840	1,865,386,420	296,905,113	Total	71,654,090	76,837,478	494,907	1,267,4
					1985/86				
Sept	79,897,274	833,679	80,730,953	29,172,725	June	1,487,412	1,649,817	44,678	87,3
Oct	124,900,086	917,870	125,817,956	23,654,139	July	3,731,241	3,860,606	23,529	69,6
Nov	210,005,197	1,173,603	211,178,800	17,378,277	Aug	5,179,203	5,303,587	33,906	163,9
					Sept	831,326	937,470	52,866	89,47
1st Qtr	414,802,557	2,925,152	417,727,709	70,205,141	1st Qtr	11,229,182	11,751,480	154,979	410,54
Dec	175,971,674	2,540,388	178,512,062	11,858,105	Oct	2,652,026	2,799,218	120,219	153,20
Jan	164,709,634	1,351,663	166,061,297	17,264,657	Nov	3,768,477	3,869,960	111,195	350,17
Feb	119,524,523	1,157,729	120,682,252	13,994,213	Dec	112,702	237,932	23,556	37,75
2nd Qtr	460,205,831	5,049,780	465,255,611	43,116,975	2nd Qtr	6,533,205	6,907,110	254,970	541,12
Mar	97,479,313	922,855	98,402,168	6,723,066	Jan	1,119,603	1,546,100	8,934	69,75
Apr	57,426,414	786,654	58,213,068	8,597,402	Feb	49,160	116,456	43,584	96,51
May	46,520,450	1,254,677	47,775,127	11,610,994	Mar	1,148	192,476	250,397	288,26
3rd Qtr	201,426,177	2,964,186	204,390,363	26,931,462	3rd Qtr	1,169,911	1,855,032	302,915	454,52
June	55,802,755	1,016,137	56,818,892	10,467,071	Apr	720,309	816,587	49,085	93,42
July	44,609,875	871,083	45,480,958	17,830,311	May	57,584	472,599	473,733	693,27
Aug	50,484,684	1,068,258	51,552,942	9,436,885					
4th Qtr	105,897,314	2,955,478	153,852,792	37,734,267	4th Qtr	777,893	1,289,186	522,818	786,69
TOTAL	1,227,331,879	13,894,596	1,241,226,475	177,987,845	Total	19,710,191	21,802,808	1,235,682	2,192,89

Continued-

Table 12--Corn, sorghum, barley, and oats exports, 1985/86 to date--continued

Year and month	CORN				Year and month	BARLEY		OATS	
	Grain only	Total process	Grand total	SORGHUM GRAIN		Grain only	Total	Grain only	Total
	Bushels					Bushels			
1986/87					1986/87				
Sept	80,082,655	1,181,307	81,263,962	14,227,263	June	2,000	276,815	79,108	128,492
Oct	124,025,138	818,619	124,843,757	18,547,828	July	1,164,620	1,597,139	81,504	217,421
Nov	114,104,314	848,497	114,952,811	14,680,456	Aug	12,319,164	12,514,711	73,364	335,437
1st Qtr	318,212,107	2,848,423	321,060,530	47,455,547	Sept	12,772,707	12,912,177	121,288	327,625
Dec	109,759,488	925,574	110,685,062	19,954,747	1st Qtr	26,258,491	27,300,842	355,264	1,008,975
Jan	104,283,400	990,714	105,274,114	15,484,239	Oct	16,480,986	16,559,353	167,403	411,976
Feb	98,787,906	657,881	99,445,787	20,749,712	Nov	14,292,746	14,363,851	32,293	167,870
2nd Qtr	312,830,794	2,574,169	315,404,963	56,188,698	Dec	14,532,134	14,661,828	17,314	315,049
Mar	143,717,211	1,658,289	145,375,500	24,415,530	2nd Qtr	45,305,866	45,585,032	217,010	894,895
Apr	183,288,269	992,304	184,280,573	12,956,519	Jan	1,205,709	1,262,335	30,960	75,145
May	169,091,351	1,485,054	170,576,405	13,788,332	Feb	16,084,544	16,522,282	30,776	178,452
3rd Qtr	496,096,831	4,135,647	500,232,478	51,160,381	Mar	17,639,725	18,150,611	115,234	277,846
June	120,026,244	791,997	120,818,241	12,940,287	3rd Qtr	34,929,978	35,935,228	176,970	531,443
July	133,984,531	916,175	134,900,706	22,883,734	Apr	16,599,968	17,153,570	105,251	191,418
Aug	111,320,100	688,763	112,008,863	7,698,710	May	10,522,937	10,726,481	67,436	168,607
4th Qtr	365,330,875	2,396,935	367,727,810	43,522,731	4th Qtr	27,122,905	27,880,051	172,687	360,025
TOTAL: 1987/88	1,492,470,607	11,955,174	1,504,425,781	198,327,357	TOTAL	133,617,240	136,701,153	921,931	2,795,338
Sept.	135,403,937	727,001	136,130,948	17,832,854	1987/88				
Oct.	137,693,604	1,091,494	138,785,098	16,734,001	June	517,681	754,738	104,217	187,886
Nov.	122,468,369	617,937	123,086,306	10,296,951	July	7,421,463	7,675,576	50,113	92,430
1st Qtr.	395,565,910	2,436,432	398,002,352	44,863,806	Aug	8,813,825	9,257,652	18,135	153,171
Dec.	148,189,862	1,096,723	149,286,585	21,462,657	Sept	10,014,514	10,217,330	24,184	62,343
					1st Qtr	26,847,483	27,905,299	196,649	495,830
					Oct.	16,474,137	17,009,495	62,220	144,789
					Nov.	17,914,754	18,114,982	38,617	99,130
					Dec.	15,503,102	16,123,445	5,680	36,703
					2nd Qtr.	49,971,993	51,247,922	106,517	280,622

Total corn exports include grain only (white, yellow, seed, relief), dry process (cornmeal for relief, as grain, grits), and wet process (corn starch, sugar dextrose, glucose, high fructose). Sorghum includes seed and unmilled. Barley includes grain only (grain for malting purposes, other) and barley malt. Oats include grain and oatmeal (bulk and packaged).

Source: Bureau of the Census, U.S. Department of Commerce.

Table 13.—Corn, sorghum, barley, and oats imports, 1975/76 to date

Year and month	CORN		SORGHUM	Year and month	BARLEY		OATS	
	Grain only	Total			Grain only	Total	Grain only	Total
		Bushels				Bushels		
1975/76				1975/76				
Sept	48,468	49,894	1,177	June	759,873	1,016,094	95,341	104,362
Oct	172,388	204,758	0	July	898,065	1,262,809	87,448	95,062
Nov	19,550	69,861	0	Aug	2,358,988	2,707,006	64,522	66,588
				Sept	1,436,833	1,804,423	6,357	9,663
1st Qtr	240,406	324,513	1,177	1st Qtr	5,453,759	6,790,332	253,668	275,675
Dec	267,752	303,437	0	Oct	783,803	1,093,718	8,574	30,049
Jan	184,083	221,905	0	Nov	781,713	1,169,351	19,070	21,484
Feb	144,936	176,862	0	Dec	2,025,728	2,352,469	27,389	42,320
2nd Qtr	596,771	702,204	0	2nd Qtr	3,591,244	4,615,538	55,033	93,853
Mar	134,347	145,986	0	Jan	835,254	1,087,702	107,560	132,659
Apr	48,183	55,922	0	Feb	784,581	969,243	35,929	47,306
May	22,372	27,433	0	Mar	590,585	690,283	21,257	23,335
3rd Qtr	204,902	229,341	0	3rd Qtr	2,210,420	2,747,228	164,746	203,300
June	304,818	315,434	70					
July	78,435	87,714	48	Apr	587,540	659,960	27,889	48,705
Aug	72,218	76,070	0	May	858,273	964,963	11,753	14,926
4th Qtr	455,471	479,218	118	4th Qtr	1,445,813	1,624,923	39,642	63,631
TOTAL	1,497,550	1,735,276	1,295	TOTAL	12,701,236	15,778,021	513,089	636,459
1976/77				1976/77				
Sept	136,434	138,356	0	June	2,009,994	2,236,414	15,553	34,491
Oct	83,151	94,029	0	July	637,977	857,761	64,577	67,191
Nov	266,733	314,577	0	Aug	1,245,395	1,467,011	4,525	12,429
				Sept	798,349	1,046,108	21,936	29,934
1st Qtr	486,318	546,962	0	1st Qtr	4,691,715	5,607,294	106,591	144,045
Dec	177,310	190,508	0	Oct	4,818	141,142	14,876	32,860
Jan	70,481	96,489	0	Nov	196,948	318,012	14,817	20,315
Feb	145,926	157,106	0	Dec	404,334	538,177	78,462	89,895
2nd Qtr	393,717	444,103	0	2nd Qtr	606,100	997,331	108,155	143,070
Mar	7,498	27,487	0	Jan	946,916	1,102,450	120,235	132,790
Apr	87,050	99,854	188	Feb	493,961	624,453	197,133	206,380
May	438,329	443,685	95	Mar	738,623	902,746	284,257	300,780
3rd Qtr	532,877	571,026	283	3rd Qtr	2,179,500	2,629,649	601,625	639,970
June	312,460	313,099	0					
July	185,817	186,291	0	Apr	632,074	833,943	218,521	232,340
Aug	519,655	520,236	0	May	498,445	802,958	330,055	336,980
4th Qtr	1,017,932	1,019,626	0	4th Qtr	1,130,519	1,636,901	548,576	569,330
TOTAL	2,430,844	2,581,717	283	TOTAL	8,607,834	10,871,175	1,364,947	1,496,420
1977/78				1977/78				
Sept	97,920	100,788	0	June	2,368,640	2,764,183	740,077	750,820
Oct	482,174	505,782	0	July	412,910	853,478	129,463	151,228
Nov	60,677	97,097	0	Aug	569,880	1,019,874	65,239	78,550
				Sept	243,812	473,873	122,581	137,310
1st Qtr	640,771	703,667	0	1st Qtr	3,595,242	5,111,408	1,057,360	1,117,970
Dec	75,411	96,626	0	Oct	28,317	239,542	99,251	111,610
Jan	158,735	183,155	0	Nov	482,820	650,891	168,296	175,800
Feb	421,573	436,495	0	Dec	839,755	938,042	175,350	187,530
2nd Qtr	655,719	716,276	0	2nd Qtr	1,350,892	1,828,475	442,897	474,950
Mar	236,524	283,308	0	Jan	712,903	913,625	108,038	116,320
Apr	156,639	168,200	196	Feb	250,900	431,801	143,408	161,220
May	133,843	145,851	24	Mar	241,366	457,093	118,171	129,600
3rd Qtr	527,006	597,359	220	3rd Qtr	1,205,169	1,802,519	369,617	407,150
June	83,059	90,792	0					
July	188,531	194,522	10,231	Apr	69,881	225,945	121,018	135,020
Aug	302,798	304,310	11,101	May	221,767	505,948	99,055	110,750
4th Qtr	574,388	589,624	21,332	4th Qtr	291,648	731,893	216,073	245,770
TOTAL	2,397,884	2,606,926	21,552	TOTAL	6,442,991	9,474,295	2,085,947	2,245,860

Continue

Table 13.—Corn, sorghum, barley, and oats imports, 1975/76 to date—continued

Year and month	CCRN		SORGHUM Total	Year and month	BARLEY		OATS	
	Grain only	Total			Grain only	Total	Grain only	Total
		Bushels				Bushels		
1978/79				1978/79				
Sept	80,998	82,019	0	June	276,896	532,672	127,847	137,213
Oct	11,397	21,149	0	July	986,064	1,418,338	37,885	47,913
Nov	42,821	54,334	0	Aug	234,024	548,660	23,378	32,299
1st Qtr	135,216	157,502	0	Sept	40,043	255,486	32,927	44,496
Dec	59,339	72,321	0	1st Qtr	1,537,027	2,755,156	222,037	261,921
Jan	243,704	260,550	0	Oct	110,994	429,614	25,408	32,598
Feb	1,039	50,782	0	Nov	825,557	1,049,732	25,151	34,041
2nd Qtr	304,082	383,653	0	Dec	971,916	1,281,034	39,165	51,008
Mar	103,947	116,395	0	2nd Qtr	1,908,467	2,760,380	89,724	117,647
Apr	69,498	76,740	0	Jan	797,988	1,134,539	60,200	71,444
May	122,910	130,212	1,890	Feb	384,319	650,039	57,616	67,459
3rd Qtr	296,355	323,347	1,890	Mar	899,926	1,274,511	80,120	87,131
June	47,909	49,367	0	3rd Qtr	2,082,233	3,059,089	197,936	226,034
July	278,155	280,696	0	Apr	447,587	845,535	67,809	74,249
Aug	90,816	94,387	0	May	737,200	1,117,318	47,728	67,072
4th Qtr	416,880	424,450	0	4th Qtr	1,184,787	1,962,853	115,537	141,321
TOTAL	1,152,533	1,288,952	1,890	TOTAL	6,712,514	10,537,478	625,234	746,923
				1979/80				
1979/80				June	508,172	956,165	66,902	75,963
Sept	67,261	70,547	17	July	1,053,302	1,401,581	32,700	53,911
Oct	60,135	91,870	33	Aug	184,716	853,786	103,339	112,444
Nov	87,671	96,674	0	Sept	146,405	480,704	81,605	103,334
1st Qtr	215,067	259,091	50	1st Qtr	1,892,595	3,692,236	284,546	345,652
Dec	44,485	67,828	0	Oct	481,803	755,918	45,908	61,834
Jan	49,000	64,908	0	Nov	511,546	736,945	54,732	57,802
Feb	72,887	93,576	0	Dec	1,046,665	1,322,822	50,978	64,850
2nd Qtr	166,372	226,312	0	2nd Qtr	2,040,014	2,815,685	151,618	184,486
Mar	121,254	129,375	0	Jan	702,837	977,405	48,718	56,241
Apr	4,185	15,705	1,802	Feb	245,660	680,313	46,740	58,823
May	74,202	84,856	0	Mar	958,739	1,536,331	68,318	91,744
3rd Qtr	199,641	229,936	1,802	3rd Qtr	1,907,236	3,194,049	163,776	206,808
June	11,404	16,394	0	Apr	174,456	658,919	68,142	88,969
July	20,221	26,082	394	May	1,151,699	1,476,137	108,118	122,956
Aug	108,026	112,586	0	4th Qtr	1,326,155	2,135,056	176,260	211,925
4th Qtr	139,651	155,062	394	TOTAL	7,166,000	11,837,026	776,200	948,871
TOTAL	720,731	870,401	2,246	1980/81				
1980/81				June	620,387	1,007,100	208,364	217,350
Sept	174,580	251,525	17	July	475,033	897,820	99,739	117,566
Oct	62,982	91,027	0	Aug	198,458	613,721	138,041	150,113
Nov	54,852	119,771	7,143	Sept	576,818	994,834	103,180	114,358
1st Qtr	292,414	462,323	7,160	1st Qtr	1,870,696	3,513,475	549,324	599,387
Dec	815	14,058	0	Oct	418,748	716,432	78,330	92,721
Jan	981	41,791	0	Nov	272,608	649,066	37,899	44,456
Feb	1,471	117,558	1,429	Dec	616,398	971,698	68,867	73,711
2nd Qtr	3,267	173,407	1,429	2nd Qtr	1,307,754	2,337,196	185,096	210,888
Mar	43,305	114,750	1,125	Jan	405,615	753,860	48,185	83,723
Apr	1,810	41,432	16	Feb	502,852	786,383	72,464	90,183
May	503	56,863	0	Mar	687,319	1,176,303	67,501	75,690
3rd Qtr	45,618	213,045	1,141	3rd Qtr	1,595,786	2,716,546	188,150	249,596
June	407,509	418,284	39	Apr	388,038	662,947	100,117	105,706
July	48,187	60,912	0	May	702,898	975,666	109,205	128,927
Aug	51,275	57,174	16	4th Qtr	1,090,936	1,638,613	209,322	234,633
4th Qtr	506,971	536,370	55	TOTAL	5,865,172	10,205,830	1,131,892	1,294,504
TOTAL	848,270	1,385,145	9,785					

Continued—

Table 13.—Corn, sorghum, barley, and oats imports, 1975/76 to date—continued

Year and month	CORN		SORGHUM Total	Year and month	BARLEY		OATS	
	Grain only	Total			Grain only	Total	Grain only	Total
		Bushels				Bushels		
1981/82				1981/82				
Sept	47,232	50,064	0	June	610,314	807,773	100,775	117,252
Oct	54,527	85,484	0	July	338,217	528,962	65,137	86,099
Nov	8,426	71,590	0	Aug	160,069	369,781	53,075	60,145
				Sept	318,906	648,411	76,882	83,979
1st Qtr	110,185	206,938	0	1st Qtr	1,427,506	2,354,927	295,869	347,475
Dec	158,826	231,084	167	Oct	181,471	437,924	60,349	69,425
Jan	321	32,702	0	Nov	647,471	896,666	70,277	81,798
Feb	118	105,527	15	Dec	892,812	1,086,699	60,553	70,180
2nd Qtr	159,265	369,313	182	2nd Qtr	1,721,754	2,421,289	191,179	221,403
Mar	1,063	116,202	199	Jan	780,039	989,703	30,724	43,110
Apr	4,900	20,978	0	Feb	844,258	1,052,933	31,463	40,939
May	34,328	54,210	106	Mar	487,592	690,770	41,105	67,490
3rd Qtr	40,291	191,390	305	3rd Qtr	2,111,889	2,733,406	103,292	151,539
June	217,319	249,153	6,389					
July	29,526	45,153	0	Apr	983,354	1,276,341	336,288	344,204
Aug	89	6,720	9,873	May	631,815	824,440	557,422	572,517
4th Qtr	246,934	301,026	16,262	4th Qtr	1,615,169	2,100,781	893,710	916,721
TOTAL	556,675	1,068,667	16,749	TOTAL	6,876,318	9,610,403	1,484,050	1,637,138
1982/83				1982/83				
Sept	57,841	83,885	5,440	June	1,706,202	1,890,855	173,860	192,633
Oct	36,755	63,827	38,834	July	1,602,675	1,808,382	311,531	322,304
Nov	153,521	184,648	3,969	Aug	578,914	869,862	157,066	186,560
				Sept	271,038	520,052	42,950	67,955
1st Qtr	248,117	332,360	48,243	1st Qtr	4,158,829	5,089,151	685,407	769,452
Dec	52,888	81,987	2,673	Oct	118,788	375,818	41,249	48,694
Jan	5,346	25,718	0	Nov	901,290	1,166,105	69,839	82,915
Feb	383	20,320	0	Dec	210,376	359,493	80,919	101,512
2nd Qtr	58,617	128,025	2,673	2nd Qtr	1,230,454	1,901,416	192,007	233,121
Mar	52,592	116,099	24	Jan	411,890	602,902	327,193	343,005
Apr	4,472	34,644	0	Feb	573,023	702,910	346,452	361,453
May	29,196	49,197	0	Mar	695,950	855,026	688,400	846,946
3rd Qtr	86,260	199,940	24	3rd Qtr	1,680,863	2,160,838	1,362,045	1,551,404
June	72,972	79,436	29					
July	1,489	8,400	0	Apr	748,297	869,229	441,625	461,343
Aug	21,394	29,572	0	May	532,160	644,747	830,870	849,348
4th Qtr	95,855	117,408	29	4th Qtr	1,280,457	1,513,976	1,272,495	1,310,691
TOTAL	488,849	777,733	50,969	TOTAL	8,350,603	10,665,381	3,511,954	3,864,608
1983/84				1983/84				
Sept	187,378	224,236	55	June	984,175	1,076,280	1,352,013	1,374,965
Oct	74,362	103,908	0	July	697,624	811,948	4,040,293	4,067,425
Nov	135,991	181,386	0	Aug	613,639	872,632	3,759,037	3,776,309
				Sept	406,495	681,755	2,494,421	2,511,830
1st Qtr	397,731	509,530	55	1st Qtr	2,701,933	3,442,615	11,645,764	11,730,529
Dec	10,484	58,924	0	Oct	152,380	432,289	2,066,649	2,107,494
Jan	301,147	361,028	0	Nov	30,350	257,914	1,517,183	1,551,431
Feb	238	164,021	0	Dec	636,688	805,125	1,224,336	1,262,960
2nd Qtr	311,869	583,973	0	2nd Qtr	819,418	1,495,328	4,808,168	4,921,885
Mar	55,570	310,958	0	Jan	305,982	470,695	1,379,602	1,388,291
Apr	4,1092	460,456	0	Feb	105,250	246,267	3,637,066	3,665,607
May	9,899	205,026	0	Mar	292,509	445,810	5,560,632	5,580,005
3rd Qtr	486,561	976,440	0	3rd Qtr	703,741	1,162,772	10,577,300	10,633,902
June	134,071	176,922	9					
July	368,517	372,316	141,963	Apr	418,999	581,084	1,940,376	1,958,505
Aug	8,062	15,913	0	May	401,076	404,011	943,825	961,340
4th Qtr	510,650	565,151	141,972	4th Qtr	820,075	985,095	2,884,201	2,919,851
TOTAL	1,706,811	2,635,094	142,027	TOTAL	5,045,167	7,085,810	29,915,433	30,206,168

Continued--

Table 13.--Corn, sorghum, barley, and oats imports, 1965/86 to date--continued

Year and month	CORN		SORGHUM Total	Year and month	BARLEY		OATS	
	Grain only	Total			Grain only	Total	Grain only	Total
		Bushels				Bushels		
1984/85				1984/85				
Sept	116,290	127,399	0	June	920,819	1,054,291	305,312	322,345
Oct	260,438	317,134	0	July	722,362	883,625	1,469,282	1,490,031
Nov	345,944	440,702	0	Aug	1,023,658	1,165,980	217,465	234,276
				Sept	284,510	466,491	3,771,243	3,786,897
1st Qtr	722,672	885,235	0	1st Qtr	2,951,349	3,570,387	5,763,332	5,833,549
Dec	41,045	134,862	120,673	Oct	276,438	505,461	3,449,893	3,462,452
Jan	41,925	147,551	0	Nov	300,744	591,477	1,485,364	1,494,579
Feb	0	81,696	0	Dec	1,640,951	1,899,683	4,119,279	4,138,00
2nd Qtr	82,970	364,109	120,673	2nd Qtr	2,218,133	2,996,621	9,054,536	9,095,031
Mar	15,777	93,686	0	Jan	358,752	618,802	4,035,973	4,095,972
Apr	9,264	38,751	0	Feb	356,654	688,930	4,017,603	4,092,731
May	824,177	936,859	0	Mar	537,365	905,566	3,857,568	3,900,423
3rd Qtr	849,218	1,069,296	0	3rd Qtr	1,252,771	2,213,298	11,911,144	12,089,126
June	60,875	944,203	0					
July	1,428	39,177	0	Apr	939,773	1,166,350	5,170,327	5,257,192
Aug	15,836	135,868	0	May	60,460	160,312	1,720,469	7,008,343
4th Qtr	78,139	1,119,248	0	4th Qtr	1,000,233	1,326,662	6,890,796	7,008,343
TOTAL	1,732,999	3,437,888	120,672	TOTAL	7,422,486	10,106,960	33,627,808	34,026,049
1985/86				1985/86				
Sept	8,086	33,974	0	June	340,425	588,237	1,778,933	1,757,614
Oct	314,654	350,199	0	July	251,910	478,428	1,889,404	1,931,401
Nov	540,018	600,046	1,429	Aug	61,653	345,756	825,818	834,833
				Sept	109,312	347,927	1,288,425	1,304,864
1st Qtr	862,758	984,219	1,429	1st Qtr	763,300	1,760,348	5,732,580	5,828,712
Dec	121,966	258,092	0	Oct	872,324	1,087,159	1,256,991	1,264,610
Jan	374,481	483,279	0	Nov	339,674	591,311	1,672,252	1,678,864
Feb	456,976	540,101	0	Dec	592,242	689,112	3,210,457	3,232,191
2nd Qtr	953,423	1,281,472	0	2nd Qtr	1,804,240	2,367,582	6,139,700	6,175,665
Mar	369,991	416,011	0	Jan	528,661	935,239	3,264,356	3,284,460
Apr	623,207	662,745	630	Feb	1,413,559	1,589,598	2,394,906	2,418,051
May	1,212,047	1,240,983	0	Mar	261,745	443,882	2,336,953	2,366,047
3rd Qtr	2,205,245	2,319,739	630	3rd Qtr	2,203,965	2,968,719	7,996,215	8,068,558
June	1,765,143	1,774,942	0	Apr	385,235	616,253	3,574,782	3,591,060
July	2,994,897	3,082,335	797	May	1,088,551	1,276,845	3,795,409	3,822,076
Aug	1,116,694	1,139,076	0					
4th Qtr	5,876,734	5,996,353	797	4th Qtr	1,473,786	1,893,098	7,370,191	7,413,136
TOTAL	9,898,160	10,581,783	2,856	TOTAL	6,245,291	8,989,747	27,238,686	27,486,071

Continued--

Table 13.—Corn, sorghum, barley, and oats imports, 1985/86 to date

Year and month	CORN		SORGHUM Total	Year and month	BARLEY		OATS	Total
	Grain only	Total			Grain only	Total	Grain only	
		Bushels				Bushels		
1986/87				1986/87				
Sept	311,213	332,783	6,329	June	1,296,495	1,501,548	5,325,371	5,3
Oct	66,792	107,949	0	July	15,140	223,046	1,841,943	1,8
Nov	333,201	355,750	33	Aug	19,469	210,558	1,537,423	1,5
				Sept	75,927	307,474	846,095	8
1st Qtr	711,206	794,482	6,362	1st Qtr	1,407,031	2,242,626	9,550,832	9,6
Dec	66,353	131,009	0	Oct	31,578	207,980	1,262,426	1,2
Jan REV.	85,979	134,935	0	Nov	926,059	1,193,914	2,695,161	3,3
Feb	14,207	52,622	86	Dec	173,536	310,750	1,241,736	1,2
2nd Qtr	166,539	318,566	86	2nd Qtr	1,131,173	1,712,644	5,199,323	5,6
Mar	29,812	63,602	0	Jan	392,962	681,307	3,981,067	4,0
Apr	400,056	428,391	0	Feb	625,953	772,737	3,994,932	4,0
May	19,009	30,652	0	Mar	1,808,103	1,888,079	2,277,619	2,3
3rd Qtr	448,877	522,645	0	3rd Qtr	2,827,018	3,342,123	10,253,618	10,2
June	326,401	339,131	0	Apr	508,133	591,606	3,401,071	3,4
July	32,223	48,591	197	May	792,379	849,842	3,951,545	3,9
Aug	71,486	471,582	0					
4th Qtr	430,110	471,582	197	4th Qtr	1,300,512	1,441,448	7,352,616	7,4
TOTAL	1,756,732	2,107,275	6,645	TOTAL	6,665,734	8,738,841	32,356,389	33,1
1987/88				1987/88				
Sept	130,361	137,954	-0-	June	683,655	895,760	3,730,421	3,7
Oct	354,333	373,790	1,370	July	195,998	212,386	1,717,932	1,7
Nov	14,262	29,486	833	Aug	220,222	434,659	1,541,932	1,5
				Sept	1,061,243	1,396,495	1,541,932	1,5
1st Qtr	498,956	537,230	2,203	1st Qtr	2,161,118	2,939,300	8,531,570	8,5
Dec	246,126	298,521	-0-	Oct	926,329	1,222,582	1,274,484	1,2
Jan				Nov	876,498	1,209,708	5,106,952	5,1
Feb				Dec	1,146,248	1,384,777	2,537,116	2,5
2nd Qtr				2nd Qtr	2,949,075	3,817,067	8,918,552	9,1

Corn includes grain only (yellow dent corn, other), seed, and cornmeal. Sorghum is grain only. Barley includes grain only (barley for malting, other), pearl barley, milled and malting. Oats include grain (hulled or unhulled, unhull oats fit for human consumption, and oatmeal fit for human consumption).

Source: Bureau of the Census, U.S. Department of Commerce.

Table 14.--Grain protein feeds: Production, exports, and stocks by months, United States, 1970-87

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July.	Aug.	Total
1,000 short tons													
CORN GLUTEN FEED AND MEAL													
Production													
1970	112.7	157.5	144.1	141.3	133.1	122.7	154.2	139.1	162.6	157.1	148.1	147.8	1,720.3
1971	153.4	165.0	130.5	126.1	131.7	141.5	162.7	151.1	165.0	158.9	155.8	155.9	1,797.6
1972	155.9	169.9	163.4	155.5	154.6	157.0	159.9	180.8	180.2	178.5	183.8	218.2	2,057.7
1973	175.5	202.7	173.3	172.4	174.2	153.7	202.2	178.4	187.2	171.3	168.8	177.7	2,137.4
1974	188.7	191.0	172.4	182.6	203.1	192.3	197.0	193.7	215.7	203.5	196.1	205.6	2,341.7
1975	213.1	227.9	203.1	185.9	208.6	196.1	200.3	224.3	214.6	220.0	209.4	226.5	2,529.8
1976	237.6	213.8	218.0	193.6	185.0	201.9	236.3	242.4	239.9	243.6	218.8	255.9	2,686.8
1977	247.8	251.6	217.8	224.6	215.3	226.7	259.2	247.0	270.0	274.2	276.1	279.3	2,989.6
1978	278.7	286.0	243.3	249.3	208.7	222.1	289.1	237.8	318.3	300.7	287.7	287.6	3,209.3
1979	295.7	331.5	317.7	308.7	297.1	294.8	289.3	281.4	272.3	280.6	292.1	262.8	3,524.0
1980	271.7	307.0	281.0	286.7	278.7	262.6	324.0	295.9	366.4	374.2	356.2	324.4	3,720.8
1981	342.9	319.0	319.2	310.6	312.5	299.5	372.1	349.3	351.0	362.7	352.3	388.2	4,079.3
1982	384.1	351.0	401.6	336.7	325.3	358.8	386.6	397.4	387.0	434.9	397.9	455.9	4,617.2
1983	442.0	436.9	407.3	399.1	382.9	326.2	516.7	548.8	507.1	471.2	517.8	495.7	5,451.7
1984	450.0	445.1	454.0	461.6	284.6	410.2	507.3	492.9	553.6	538.3	558.1	554.5	5,710.2
1985	527.4	436.1	366.9	381.0	417.7	411.2	431.7	447.2	459.9	495.4	515.9	498.2	5,388.6
1986	480.4	484.8	439.1	444.4	445.5	411.8	479.5	459.9	465.1	481.6	498.9	405.3	5,576.3
1987	475.1	470.3	403.7										
Exports (feed and meal)													
1975	110.4	79.5	71.0	111.1	79.0	88.5	89.0	116.6	96.1	94.5	88.9	79.4	1,104.0
1976	83.3	113.9	96.4	121.2	110.8	56.7	138.1	214.5	113.7	108.8	118.3	141.6	1,417.3
1977	324.7	146.9	173.4	79.1	183.2	117.8	128.8	178.4	94.6	182.6	180.3	123.1	1,912.9
1978	209.4	69.3	185.0	184.2	105.1	127.3	148.8	199.4	165.6	327.7	143.6	198.1	2,063.9
1979	177.8	246.3	157.7	205.3	197.4	207.1	231.0	163.1	302.1	227.2	192.0	222.4	2,529.4
1980	361.5	239.6	190.8	266.4	210.4	201.2	299.4	362.2	195.5	189.6	301.4	291.9	3,109.9
1981	212.9	350.0	237.7	220.5	187.1	194.0	297.9	322.8	320.5	205.9	303.5	229.7	3,082.5
1982	212.8	280.0	294.3	297.0	295.5	362.6	355.2	532.7	275.4	303.5	317.1	257.0	3,783.1
1983	386.8	304.7	312.6	259.0	410.9	263.5	497.8	330.2	221.1	301.8	366.6	384.8	4,039.8
1984	266.4	244.3	428.7	283.3	279.5	217.9	398.9	348.2	273.2	302.5	242.0	357.1	3,642.0
1985	347.5	405.9	347.1	306.6	397.9	386.7	439.3	388.4	280.7	321.7	351.5	456.7	4,430.0
1986	426.4	361.0	357.2	481.7	492.3	327.1	519.2	420.5	398.4	346.2	350.9	267.6	4,748.5
1987	431.0	490.7	385.0										
BREWERS' DRIED GRAINS													
Production													
1970	29.0	27.8	25.1	27.2	26.8	24.9	32.1	32.1	32.4	36.0	34.9	32.0	360.3
1971	30.1	28.3	24.9	27.2	26.4	28.2	31.9	32.7	34.8	35.8	34.3	33.2	367.8
1972	31.1	28.0	24.2	23.0	26.3	26.0	30.4	30.9	34.0	31.8	35.6	36.5	357.8
1973	30.2	31.8	25.3	24.3	27.0	23.9	27.7	29.1	33.2	31.8	35.4	32.4	352.1
1974	27.0	26.7	24.1	23.1	26.1	23.1	25.0	32.0	32.0	35.9	36.4	31.7	343.1
1975	30.4	31.5	22.6	26.3	25.0	25.2	16.7	23.6	26.1	30.4	31.2	33.4	322.4
1976	28.3	26.0	18.8	19.6	21.4	19.3	28.3	29.5	28.3	30.9	29.6	23.7	303.7
1977	20.4	21.3	18.3	19.9	20.2	18.5	24.2	25.8	25.7	27.8	27.6	29.4	279.1
1978	23.7	19.9	17.1	20.7	21.4	24.9	30.3	28.2	29.3	31.7	27.5	30.4	305.1
1979	26.9	28.2	22.0	22.1	25.6	25.0	28.7	29.5	31.1	28.9	34.2	31.1	333.3
1980	32.8	24.3	21.2	24.6	24.6	23.7	28.9	27.9	30.6	30.3	29.8	29.8	328.5
1981	23.4	23.0	18.4	19.6	21.1	21.6	23.3	21.0	21.9	25.1	25.0	23.4	266.0
1982	19.8	18.2	14.8	15.8	19.0	16.1	16.6	21.6	20.4	20.0	20.5	17.6	220.4
1983	13.5	10.3	9.8	9.8	11.1	10.2	13.9	13.3	12.3	15.4	16.1	17.1	152.8
1984	10.1	11.9	9.5	12.0	13.6	12.1	13.9	14.5	14.8	14.6	14.0	13.2	154.2
1985	12.1	11.7	10.1	11.0	11.4	11.9	11.7	12.7	13.7	14.3	13.4	13.4	147.8
1986	12.7	12.3	10.0	11.7	13.6	12.7	13.8	13.6	15.3	16.3	16.2	14.7	162.9
1987	10.3	11.5	8.8	11.7									
Stocks, end of month													
1970	5.4	5.1	5.3	6.9	5.3	5.3	5.1	4.7	4.1	4.2	5.2	6.8	
1971	6.4	5.6	4.7	3.9	3.8	3.8	3.6	3.5	4.1	4.0	5.8	6.4	
1972	7.0	5.6	3.8	3.0	3.1	2.4	2.6	2.7	3.1	2.4	2.5	3.0	
1973	3.0	2.0	2.5	2.0	2.3	2.4	2.6	2.0	2.4	3.0	3.8	3.5	
1974	3.4	2.9	2.9	2.7	2.4	2.3	2.0	2.7	2.0	2.2	2.0	2.2	
1975	2.7	2.5	2.5	2.6	1.5	1.5	1.3	1.2	1.5	2.5	2.2	2.3	
1976	2.4	2.2	2.2	1.9	1.4	1.4	0.8	1.4	1.3	3.1	3.1	3.3	
1977	1.9	1.4	1.3	1.6	1.0	1.7	1.4	1.9	1.8	1.1	2.0	2.9	
1978	1.7	1.8	1.3	0.9	1.0	1.0	1.4	1.0	1.1	1.4	1.0	1.9	
1979	0.9	1.0	1.4	1.0	0.6	0.8	1.0	1.2	1.7	2.0	2.1	1.9	
1980	1.8	1.7	0.9	1.3	0.8	1.1	1.2	1.4	2.0	2.0	1.9	1.3	
1981	1.0	1.2	1.0	1.3	0.5	1.1	1.0	1.4	1.2	1.5	1.3	1.1	
1982	1.5	0.8	1.4	0.9	0.8	1.4	0.7	0.6	0.6	0.9	0.6	0.7	
1983	0.7	0.4	0.3	0.2	0.4	0.4	0.5	0.8	0.7	0.7	0.9	1.0	
1984	0.8	1.0	0.9	0.7	0.8	0.6	0.5	0.8	1.1	0.9	1.1	0.9	
1985	0.9	1.1	0.7	0.6	0.7	0.5	0.6	0.6	0.7	0.7	0.8	0.7	
1986	1.0	0.7	0.4	0.7	0.3	0.4	0.5	0.3	0.6	0.6	0.6	0.7	
1987	0.7	0.4	0.3	0.1	0.1								

Continued--

Table 14.--Grain protein feeds: Production, exports, and stocks by months, United States, 1970-87--continued

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total
1,000 short tons													
DISTILLERS' DRIED GRAINS													
Production													
1970	31.8	38.0	35.8	33.5	33.7	35.6	36.3	28.7	28.6	27.8	26.6	26.0	382.4
1971	31.5	34.6	33.7	35.2	37.8	36.4	38.6	36.9	37.6	35.8	27.9	22.0	408.0
1972	27.4	31.9	33.2	33.5	35.9	36.9	41.6	40.5	41.9	40.9	31.2	31.7	426.6
1973	31.7	33.8	36.9	37.3	50.5	37.8	41.7	42.1	42.4	37.2	33.9	31.7	457.0
1974	30.7	33.6	29.4	28.1	28.0	22.2	28.9	30.0	32.2	28.6	24.0	25.8	341.5
1975	29.8	38.0	32.6	32.5	32.2	29.1	35.5	37.2	32.5	38.7	28.2	28.6	394.9
1976	32.6	30.4	31.5	26.9	30.0	29.0	36.5	33.4	30.0	29.6	29.7	32.4	372.0
1977	37.6	35.6	29.9	33.5	33.5	30.1	28.4	32.4	37.4	38.6	33.3	34.0	404.3
1978	33.3	36.7	41.3	40.5	36.4	39.2	45.1	47.4	49.3	46.0	39.5	40.2	495.0
1979	35.1	35.0	56.4	40.3	38.4	40.6	47.7	44.9	49.2	41.9	30.3	33.3	493.1
1980	36.5	42.5	42.7	43.5	43.8	40.7	50.8	48.0	39.9	34.1	33.3	39.0	494.8
1981	41.9	41.8	39.1	43.4	35.1	35.7	40.6	34.3	40.7	47.7	41.3	45.1	486.7
1982	50.9	61.9	62.2	66.3	62.9	55.3	65.9	61.6	69.3	69.8	62.1	62.6	750.8
1983	50.8	61.6	29.9	44.3	53.9	54.2	57.6	56.4	56.9	55.8	51.6	50.8	623.8
1984	65.7	90.5	83.0	86.7	85.5	81.5	97.5	88.5	94.1	76.5	77.5	76.3	1,003.1
1985	83.1	110.4	101.7	101.2	103.6	95.7	110.5	107.3	107.7	108.7	107.4	109.3	1,246.6
1986	112.0	109.2	108.6	117.6	112.7	102.2	111.8	104.5	113.9	109.0	111.9	109.1	1,322.5
1987	109.3	116.0	100.6	112.8									
Stocks, end of month													
1970	1.6	1.9	2.2	2.2	1.7	1.6	2.4	1.5	1.2	1.6	.9	1.1	
1971	2.0	1.7	3.3	4.1	2.3	2.2	2.5	2.0	2.7	2.9	1.9	1.8	
1972	1.0	1.2	1.1	1.3	1.6	1.8	1.9	2.1	4.2	2.7	3.8	2.8	
1973	1.7	3.4	3.2	2.9	3.4	2.0	3.0	4.9	3.6	2.9	4.4	1.7	
1974	1.3	3.0	1.0	1.7	1.4	1.5	2.3	2.8	4.0	5.3	5.4	4.7	
1975	4.8	4.1	4.1	4.5	1.9	2.1	2.4	3.9	7.0	4.3	4.9	2.5	
1976	2.6	2.2	4.5	3.4	2.2	1.4	2.0	2.6	2.9	2.8	2.2	3.8	
1977	4.0	4.7	3.8	1.7	1.7	2.9	4.3	3.6	5.0	4.3	2.0	2.0	
1978	1.4	1.8	2.0	2.2	2.8	2.0	2.3	3.4	4.4	4.0	3.4	2.1	
1979	3.6	2.9	4.9	2.7	2.1	3.8	3.1	5.6	4.5	4.3	2.7	2.0	
1980	4.1	2.7	3.2	4.1	2.3	4.4	4.3	5.2	3.2	2.6	3.9	3.0	
1981	3.2	3.8	4.1	3.9	2.4	2.9	3.2	4.2	4.2	3.4	5.5	5.0	
1982	4.6	5.5	4.1	4.2	4.5	5.6	4.6	7.4	7.3	6.6	6.9	6.6	
1983	4.4	4.8	6.3	6.0	4.4	4.2	6.4	8.3	7.8	8.1	11.6	9.2	
1984	5.6	10.9	10.3	10.5	12.0	9.1	8.1	10.2	9.4	10.8	10.9	10.4	
1985	13.2	14.1	12.4	12.7	9.0	7.3	8.9	8.7	8.1	6.1	9.2	6.0	
1986	8.1	6.6	10.1	9.1	15.4	11.0	19.9	10.2	9.6	13.7	8.8	12.0	
1987	11.5	15.1	14.2	14.2	8.7								

Source: Corn Refiners Association, Inc. and Livestock and Grain Market News, AMS, USDA.

Table 15.--Feed grains and grain products used in the production of alcohol, distilled spirits, and beer, by months, 1975 to date 1/

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Total
1,000 bushels													
CORN AND CORN PRODUCTS													
Distilled spirits and alcohol													
1975	1,621	2,161	1,962	1,688	1,554	1,316	1,985	2,333	1,974	1,957	1,292	1,250	21,093
1976	1,511	2,072	1,632	1,274	1,464	1,607	2,022	2,004	1,959	1,756	1,415	1,613	20,329
1977	1,884	1,705	1,444	1,459	1,451	1,495	1,628	1,912	1,995	1,746	750	1,624	19,093
1978	1,682	1,962	2,121	2,120	1,849	1,928	2,168	2,274	2,399	2,217	907	1,539	23,166
1979	1,920	2,377	2,501	1,696	2,149	2,174	2,825	2,795	2,738	2,153	910	1,565	25,803
1980	1,737	2,110	1,836	1,903	2,441	2,297	2,949	2,775	2,234	1,801	1,593	2,055	25,731
1981	2,240	2,621	2,066	2,550	2,433	2,869	4,024	3,630	3,369	3,261	4,075	3,528	36,666
1982	4,829	6,291	6,007	6,443	6,188	5,654	6,029	4,584	5,565	5,955	5,135	4,905	67,665
1983	3,898	3,892	3,599	3,446	3,690	3,800	4,261	4,238	3,902	3,091	2,571	3,035	43,423
1984	3,532	5,395	5,299	5,150	5,294	5,262	6,033	5,403	4,568	5,950	6,385	5,640	63,911
1985	5,691	5,997	2,927	2,071	2,242	2,162	2,788	3,114	4,679	4,570	3,815	3,989	44,045
1986	4,500	4,994	4,568	4,797	4,618	4,376	4,775	4,536	4,756	4,614	4,334	4,288	55,156
1987	4,401	4,522											
Beer													
1975	4,069	3,598	3,258	3,651	3,435	3,259	4,234	4,503	5,369	5,584	4,875	4,728	50,563
1976	4,118	4,006	3,422	3,381	3,715	3,693	5,526	5,375	5,402	5,275	4,890	4,805	53,608
1977	3,900	3,679	3,644	3,793	3,960	3,904	4,555	4,708	4,788	5,017	4,655	4,892	51,495
1978	3,989	3,907	3,511	3,478	3,529	3,166	4,232	4,149	4,334	4,115	4,366	4,205	46,981
1979	3,547	3,546	3,191	2,991	3,463	3,786	4,049	4,011	4,376	4,335	4,627	4,353	46,275
1980	3,985	3,600	3,359	3,772	3,070	3,576	3,965	4,262	4,530	4,540	4,693	4,117	47,469
1981	3,586	3,547	2,959	3,102	3,389	3,447	4,015	3,998	4,178	3,677	3,829	3,878	43,605
1982	3,461	3,329	2,910	2,960	3,157	3,128	3,809	3,633	3,884	4,038	4,255	3,787	42,351
1983	3,421	3,166	2,872	2,362	3,180	3,408	4,049	4,309	4,235	3,963	3,994	3,569	42,528
1984	2,829	3,327	2,673	2,397	2,889	2,985	3,314	3,923	4,240	4,078	3,595	3,410	39,660
1985	3,220	3,259	2,649	2,498	3,191	3,157	3,469	3,929	4,120	3,838	3,769	3,110	40,209
1986	2,759	2,862	2,419	2,411	2,777	2,860	3,164	3,073	3,199	3,178	3,049	2,780	34,531
1987	2,734	2,362	2,213										
TOTAL DISTILLED SPIRITS AND BEER													
1975	5,690	5,759	5,220	5,339	4,989	4,575	6,219	6,836	7,343	7,541	6,167	5,978	71,656
1976	5,629	6,078	5,054	4,655	5,179	5,300	7,548	7,379	7,361	7,031	6,305	6,418	73,937
1977	5,784	5,384	5,088	5,252	5,411	5,399	6,183	6,620	6,703	6,763	5,405	6,516	70,588
1978	5,671	5,869	5,632	5,598	5,378	5,094	6,423	6,733	6,733	6,332	5,273	5,744	70,147
1979	5,467	5,923	5,692	4,687	5,612	5,960	6,874	6,806	7,114	6,408	5,537	5,918	72,078
1980	5,722	5,710	5,195	5,675	5,511	5,873	6,914	7,037	6,764	6,341	6,286	6,172	73,200
1981	5,826	6,168	5,025	5,652	5,822	6,316	8,039	7,628	7,547	6,938	7,904	7,406	80,271
1982	8,290	9,620	8,917	9,403	9,345	8,782	9,838	8,217	9,449	9,993	9,390	8,772	110,016
1983	7,319	7,058	6,471	5,808	6,870	7,208	8,310	8,547	8,137	7,054	6,565	6,604	85,951
1984	6,361	8,722	7,972	7,547	8,183	8,247	9,347	9,326	8,808	10,028	9,980	9,050	103,571
1985	8,911	9,256	5,576	4,569	5,433	5,319	6,257	7,043	8,799	8,408	7,584	7,099	84,254
1986	7,259	7,856	6,987	7,208	7,395	7,236	7,939	7,609	7,955	7,992	7,383	7,068	89,687
1987	7,240	6,884											
GRAIN SORGHUM													
Distilled spirits and alcohol													
1975	234	255	195	248	209	147	255	249	397	235	208	223	2,855
1976	252	277	224	201	212	214	200	212	246	237	245	225	2,745
1977	237	294	215	250	289	354	306	294	307	300	386	316	3,548
1978	308	363	369	368	366	320	375	353	347	296	331	349	4,145
1979	349	442	434	418	460	392	368	271	399	320	406	353	4,612
1980	331	379	415	399	199	275	379	340	380	381	357	370	4,205
1981	409	392	410	456	420	406	437	390	415	386	415	371	4,907
1982	269	231	378	389	356	355	341	264	299	347	322	253	3,704
1983	334	409	364	334	279	263	195	246	304	326	306	323	3,683
1984	362	1,311	1,207	1,503	1,085	835	1,117	1,110	943	516	474	523	10,986
1985	1,170	1,499	2,183	2,763	2,875	2,694	2,798	2,056	769	410	1,515	833	21,565
1986	467	315	370	423	519	363	360	471	421	337	444	318	4,088
1987	348	593											

Continued--

Table 15.--Feed grains and grain products used in the production of alcohol, distilled spirits, and beer, 1975 to date--continued

Year	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Total
1,000 bushels													
BARLEY AND MALT													
Distilled spirits and alcohol													
1975	165	97	97	191	300	335	251	228	212	242	305	270	2,693
1976	263	147	173	209	231	193	212	227	246	332	293	287	2,813
1977	256	198	259	262	265	202	184	202	210	226	250	268	2,782
1978	228	127	240	269	289	321	340	256	294	335	352	363	3,414
1979	302	156	221	264	291	273	288	266	255	333	329	352	3,330
1980	222	118	180	195	241	164	230	320	297	358	345	321	2,991
1981	248	162	189	247	315	297	263	287	302	358	369	283	3,320
1982	235	199	185	455	309	274	225	252	292	315	288	248	3,277
1983	180	94	132	158	167	182	160	210	263	289	252	213	2,300
1984	105	56	110	162	216	240	167	192	194	180	156	182	1,960
1985	152	119	141	149	173	370	122	163	169	185	183	148	2,074
1986	127	95	77	114	140	117	115	162	167	253	225	200	1,792
1987	112	83	100	84	107								
Beer													
1975	12,060	12,266	11,173	10,265	9,516	8,798	9,318	9,677	9,536	8,430	10,322	11,418	122,779
1976	11,988	12,297	12,271	10,969	10,304	8,567	8,504	9,244	8,693	11,930	12,164	12,240	129,171
1977	12,671	11,982	11,103	9,595	9,448	9,244	8,902	9,950	9,832	12,355	12,170	12,656	129,908
1978	13,059	13,051	14,020	11,494	12,094	9,849	10,142	10,792	10,523	13,284	12,614	13,326	144,248
1979	13,106	13,293	13,119	11,450	12,014	10,689	10,483	11,100	12,061	12,970	13,242	14,035	147,570
1980	14,191	14,721	14,148	12,860	12,106	10,548	10,616	10,622	11,595	12,857	13,678	14,451	152,393
1981	14,194	14,356	13,466	11,806	11,319	9,852	10,056	12,234	11,232	12,814	13,193	13,259	147,781
1982	13,628	12,430	12,590	11,537	11,251	10,061	9,981	11,113	10,640	12,862	12,724	13,350	142,167
1983	13,427	13,027	13,068	10,778	10,779	9,670	9,031	10,526	10,925	13,008	12,209	13,632	140,160
1984	13,333	13,751	12,456	10,396	10,900	9,348	9,617	11,136	10,357	12,253	13,101	13,390	140,038
1985	12,880	12,597	11,647	10,367	11,040	9,362	9,578	11,568	11,081	11,925	12,803	12,706	137,554
1986	13,323	13,404	11,904	10,861	11,162	9,719	10,377	11,625	11,125	12,939	12,150	11,207	139,956
1987	12,781	12,273	11,905	11,329	10,456								
TOTAL DISTILLED SPIRITS AND BEER													
1975	12,225	12,363	11,270	10,456	9,816	9,133	9,569	9,905	9,748	8,672	10,627	11,688	125,472
1976	12,251	12,444	12,444	11,178	10,535	8,760	8,716	9,471	8,939	12,262	12,457	12,527	131,984
1977	12,927	12,180	11,362	9,857	9,713	9,446	9,086	10,152	10,042	12,581	12,420	12,924	132,690
1978	13,287	13,178	14,260	11,763	12,383	10,170	10,482	11,048	10,817	13,619	12,966	13,689	147,662
1979	13,408	13,449	13,340	11,714	12,305	10,962	10,771	11,366	12,316	13,311	13,571	14,387	150,900
1980	14,413	14,839	14,328	13,055	12,347	10,712	10,846	10,942	11,892	13,215	14,023	14,772	155,384
1981	14,442	14,518	13,655	12,053	11,634	10,149	10,319	12,521	11,534	13,172	13,562	13,542	151,101
1982	13,863	12,629	12,775	11,992	11,560	10,335	10,206	11,365	10,932	13,177	13,012	13,598	145,444
1983	13,607	13,121	13,200	10,936	10,946	9,852	9,191	10,736	11,188	13,297	12,541	13,845	142,460
1984	13,438	13,807	12,566	10,558	11,116	9,588	9,784	11,328	10,551	12,433	13,257	13,572	141,998
1985	13,032	12,716	11,788	10,516	11,213	9,732	9,700	11,731	11,250	12,110	12,986	12,854	139,628
1986	13,450	13,499	11,981	10,975	11,302	9,836	10,492	11,787	11,292	12,992	12,375	11,207	141,188
1987	12,893	12,356	12,005	11,413	10,563								

Mostly for beverage but also includes some industrial alcohol and may include some fuel alcohol.
Source: Department of the Treasury, Bureau of Alcohol, Tobacco and Firearms.

Table 16.--Hay: Production, harvested acreage, yield, prices received by farmers, and stocks

Year	Production			Harvested acreage	Yield per harvested acre	Season average price	Stocks	
	Alfalfa hay	Other	Total all hay				January 1	May 1
	----- 1,000 tons -----			1,000 acres	Tons	Dol./ton	- 1,000 tons	
1970	75,573	51,396	126,969	61,467	2.07	26.10	89,365	24,056
1971	77,285	51,847	129,132	61,355	2.10	28.10	87,651	22,200
1972	78,226	50,339	128,565	59,680	2.15	31.30	89,445	25,472
1973	78,805	55,412	134,217	61,078	2.17	41.60	88,790	24,311
1974	74,368	52,016	126,384	60,195	2.10	50.90	93,159	25,353
1975	78,183	54,214	132,397	61,353	2.16	52.10	84,607	18,505
1976	69,960	50,165	120,125	60,377	1.99	60.20	86,411	25,541
1977	80,814	51,397	132,211	60,988	2.17	53.70	77,651	19,540
1978	87,294	56,523	143,817	62,113	2.32	49.80	92,136	24,184
1979	88,110	59,197	147,307	61,279	2.40	59.40	99,024	30,108
1980	79,963	50,777	130,740	58,870	2.22	71.00	107,707	33,192
1981	83,696	58,824	142,520	59,599	2.39	67.30	91,689	25,374
1982	88,385	60,856	149,241	59,812	2.50	69.30	99,160	24,981
1983	82,212	58,552	140,764	59,717	2.36	75.80	103,996	28,118
1984	90,105	60,543	150,648	61,445	2.45	72.70	89,280	20,148
1985	85,048	63,553	148,601	60,423	2.46	67.60	100,589	26,853
1986	91,552	63,977	155,529	62,419	2.49	59.60 1/	121,734	26,698
1987	84,554	64,588	149,142	60,784	2.46		119,749	32,359

1/ Per program modification, hay stocks survey reference date has been changed from January 1 to December 1 beginning December 1, 1986.

Source: Agricultural Statistics Board, USDA.

Table 17.--Hay: Average prices received by farmers, United States, by months; 1970-87 1/

Year	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Average 2/
Dollars per ton													
1970	23.50	22.40	22.10	22.50	23.30	23.90	24.40	25.00	25.40	25.80	26.00	26.10	26.10
1971	25.60	24.60	24.10	24.30	24.50	24.90	25.30	26.10	29.20	29.70	29.00	28.00	28.10
1972	31.10	30.90	28.50	29.30	29.80	30.30	31.00	33.00	34.60	35.40	35.40	33.90	31.30
1973	37.50	35.20	36.30	39.00	43.10	46.20	46.80	46.00	47.10	47.10	45.40	44.40	41.60
1974	54.00	47.70	48.20	51.10	51.90	51.50	50.30	50.70	50.10	49.30	49.70	52.40	50.90
1975	56.30	53.60	51.20	51.00	50.80	50.30	50.20	51.60	52.70	54.30	54.10	54.10	52.10
1976	64.10	59.60	59.00	58.70	60.80	60.10	59.00	59.00	60.90	62.70	63.90	63.20	60.20
1977	68.10	61.30	56.80	52.50	50.00	48.20	48.40	49.50	50.50	51.80	51.40	51.40	53.70
1978	55.30	51.20	49.20	49.00	47.80	47.10	46.40	47.30	48.90	50.70	50.20	49.90	49.80
1979	65.60	58.00	56.00	57.50	59.00	60.80	58.90	60.10	59.10	60.00	57.40	60.10	59.40
1980	69.30	65.10	67.00	67.20	71.90	77.20	75.00	74.80	72.80	72.50	69.80	68.20	71.00
1981	75.30	66.90	64.00	63.90	62.70	64.80	65.40	65.70	67.90	69.90	69.50	73.30	67.30
1982	77.50	69.60	66.10	65.00	66.80	67.10	68.70	68.60	70.30	73.20	69.90	74.00	69.30
1983	78.10	72.70	71.20	71.20	74.70	76.80	75.10	76.70	76.60	78.70	79.40	79.80	75.80
1984	82.50	76.10	72.40	70.40	70.70	73.10	71.40	73.40	73.00	73.10	72.20	72.50	72.70
1985	80.80	70.20	67.90	65.20	67.10	67.50	64.30	65.40	65.80	66.70	67.10	66.20	67.60
1986	66.70	61.00	58.80	58.20	57.60	57.90	56.00	57.70	56.10	58.50	59.20	64.00	59.60
1987	73.80	63.20	61.60	61.80	65.10	65.10	62.10	65.00	62.80				

1/ Prices reported for mid-month. 2/ U.S. season average prices weighted by marketings.

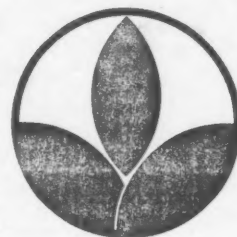
Source: Agricultural Prices, Agricultural Statistics Board, USDA.

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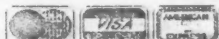
Of **USDA's OUTLOOK '88 CONFERENCE**, Dec. 1-3, 1987

- Q 87USDA-1A Opening Session: Keynote
- Q 87USDA-1B Address: *Richard E. Lyng, Economic Outlook, Lawrence Chmerine, Agricultural Outlook, James R. Donald, (2 tape set)*
- Q 87USDA-2A International Trade Challenges, Part 1 U.S. Agricultural Trade Outlook and Trade Issues, *Tom Kay, Trade Challenges: The International View, Aart de Zeeuw*
- Q 87USDA-2B International Trade Challenges, Part 2 U.S. Farmers' Perspective, *Dean Kleckner, Agribusiness Perspective, Charles "Mike" Harper, Private Sector Perspective, Carol Brookins*
- Q 87USDA-3 Panel: International Trade Challenges & U.S. Agriculture
- Q 87USDA-4 Feed Grains Outlook, *Lawrence Van Meir, Industry Reaction, Mike Laserson, Foreign Perspective, Daniel A. Miro*
- Q 87USDA-5 Food Grains & Grain Followup: Food Grains Outlook, *Frank Gomme, Industry Reaction, Adrian Tew, Foreign Perspective, Robert Bain, Long Term Outlook for Grain Demand, Martin Abel*
- Q 87USDA-6 Generic Certificates: Certificate Policy Issues and Outlook, *William C. Bailey, Industry Reaction, Don Hilger*
- Q 87USDA-7 Livestock Outlook: Cattle and Sheep Outlook, *Ronald A. Gustafson, Hog Outlook, Leland Southard, Poultry Outlook, Jack Ross, Industry Reaction, Robert Hammele*
- Q 87USDA-8 Meat and Poultry Trade: Expanding U.S. Meat and Poultry Exports: Meat Exports, *Ronald P. Davis, Poultry Exports, Ebert Boyd*
- Q 87USDA-9 Dairy Outlook, *James J. Miller, Dairy Programs, Larry Hamm, How the Dairy Industry Would Fare Under Free Trade, Milton Halberg*
- Q 87USDA-10 Cotton Outlook, *Robert A. Skinner, Where In the World is Cotton Headed? Trade Prospects to 1990, Lawrence H. Shaw, Industry Reaction, Dean Ethridge*
- Q 87USDA-11 Sweeteners Outlook, *Robert D. Barry, World Perspective, Helmut Ahlfeld, Changing Marketing Patterns, Merrill J. Bateman*
- Q 87USDA-12 Nutrition: Linking Production with Nutritional Concerns: What Consumers Want, *Jane Anderson, Product Technology, Barbara Luke, Industry Response, David H. Hunt*
- Q 87USDA-14 Oilseeds Outlook, *Roger Hoskin, Industry Reaction, Dale Gustafson, Foreign Perspective, Silmar Cesar Mueller*
- Q 87USDA-16 Fruit / Vegetables Outlook & Fruit / Vegetable Followup: Fruit Outlook, *Ben W. Huang, Vegetable Outlook, Shannon R. Hamm, The Impact of the Immigration Reform and Control Act, Allison T. French, International Trade, Desmond O'Rourke*
- Q 87USDA-18 Sweeteners Followup: Industry Reaction, *Thomas A. Hammer and Eiler C. Ravnholt, Discussion*

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